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BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS

BOB STUMP - CHAIRMAN

GARY PIERCE

BRENDA BURNS

BOB BURNS

SUSAN BITTER SMITH

2013 AUG 16 P 3:39

ARIZONA CORPORATION COMMISSION
DOCKET CONTROL

THOMAS PATZKE,

Complainant,

vs.

TUCSON ELECTRIC POWER COMPANY,

Respondent.

) DOCKET NO. E-01933A-12-0416

)
)
) **TUCSON ELECTRIC POWER**
) **COMPANY'S NOTICE OF**
) **FILING TESTIMONY**

Tucson Electric Power Company ("TEP" or "Company"), through undersigned counsel,
files the Testimony of Carmine Tilghman.

RESPECTFULLY SUBMITTED this 16th day of August 2013.

TUCSON ELECTRIC POWER COMPANY

By


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Arizona Corporation Commission
DOCKETED

AUG 16 2013

DOCKETED BY

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BOB STUMP, CHAIRMAN
GARY PIERCE
BRENDA BURNS
BOB BURNS
SUSAN BITTER SMITH

Respondent.

DOCKET NO. E-01933A-12-0416

August 16, 2013

1 **Q. Please state your name and business address.**

2 A. My name is Carmine Tilghman and my business address is 88 East Broadway Blvd,
3 Tucson, Arizona, 85701.

4
5 **Q. By whom are you employed and in what capacity?**

6 A. I am the Director of Renewable Resources and Programs for Tucson Electric Power
7 Company ("TEP" or "Company").

8
9 **Q. Please describe your background and work experience.**

10 A. I served in the United State Navy from 1984-1993 as a Nuclear Reactor Operator in
11 Submarine Service. From 1993-1995, I worked as a Power Plant Operator for the
12 Biosphere II Project in Oracle, Arizona.

13 I was hired by TEP in 1995 as a Power Plant Operator. In 1996, I moved into TEP's
14 Wholesale Marketing Department where I held several positions in Energy Trading,
15 Marketing, Project Management, and Scheduling before being promoted to Supervisor
16 Manager in 2003. From 2003-2008, I held supervisory positions in Trading, Scheduling
17 and Procurement before taking over Utility Scale Renewable Energy Development in
18 2008.

19 In 2010 I took over all aspects of renewable energy development for TEP. In 2012 I was
20 promoted to Direct of Renewable Resources and Programs, where I was responsible for the
21 renewable resources and renewable resource programs for TEP, including compliance with
22 the Arizona Corporation Commission's ("Commission") Renewable Energy Standard and
23 Tariff Rules ("REST Rules"). In 2013, I was promoted to Director of Wholesale and
24 Renewable Energy.

25 I received my Bachelor of Science in Business Management from the University of
26 Phoenix in 2000 and Master of Business Administration from the University of Phoenix in
27 2002.

1 **Q. What is the purpose of your Direct Testimony?**

2 A. The purpose of my testimony is to respond to the Complaint and Testimony filed by
3 Thomas Patzke.
4

5 **Q. Do you believe that the Complainant is entitled to the relief requested in the**
6 **Complaint?**

7 A. No. The Complainant is not entitled to the claimed additional incentive. Furthermore,
8 the payment of such additional incentive under these circumstances would be inconsistent
9 with the Commission-approved 2011 Renewable Energy Credit Purchase Program
10 ("RECPP"), as well as TEP's procedures in its administration of the RECPP. Moreover,
11 the payment of the additional incentive would set a precedent that could be abused in the
12 manner that is the subject of this complaint. As I explain in more detail below, TEP pays
13 incentives based on the information contained in the Certificate of Completion ("COC")
14 submitted by one source; the qualified installer. TEP does not pay incentives based on
15 costs submitted from multiple sources and self-installations were not eligible for
16 incentives under the 2011 RECPP. Additionally, many of the costs claimed would not
17 have been eligible costs even if a qualified installer had submitted them. Here, TEP
18 properly paid the Complainant a \$32,544 incentive payment based off of the COCs
19 submitted by his qualified installer.
20

21 **Q. Would you please briefly summarize the application process for obtaining an Up-**
22 **Front Incentives ("UFI") under TEP's RECPP?**

23 A. A Reservation Request is submitted on-line, normally by the qualified installer, which
24 includes information about the TEP customer on whose property the system will be
25 located, the Solar Electric system itself, the calculation of the incentive, and the installer
26 of the system. TEP, then reviews the Reservation Request to ensure the application
27 conforms to the program requirements, as contained in the Commission-approved

1 RECPP for the appropriate year. If those requirements are met, TEP sends the applicant
2 a letter of confirmation of the Reservation Status. Additionally an Up Front Incentive
3 Renewable Energy Credit Purchase Agreement ("Purchase Agreement") is filled out and
4 signed by both the Company and the customers. The Purchase Agreement includes a
5 Residential Renewable Energy Application Package Coversheet, information on the
6 customer's system size, the maximum amount of UFI based on the system size, as well as
7 an Assignment of Payment.

8
9 Upon completion of the project, the qualified installer notifies TEP that the system has
10 been placed in service and submits a COC. The COC is the document from which the
11 Company calculates the appropriate incentive to pay, and therefore must include true and
12 accurate representations of the Total System Size as well as the Total Cost. The incentive
13 is calculated as a dollar per watt figure (as laid out in the applicable year's RECPP) or up
14 to 50% of the Total Cost, and payment is then disbursed within 30 days of acceptance test
15 and receipt of the COC.

16
17 **Q. What is an UFI and how was it calculated in 2011?**

18 A. A UFI is an incentive where the customer receives a one-time payment based on the
19 system's designed capacity, or 50% of the total cost. Residential Solar Electric Systems
20 smaller than 20kWac are eligible for UFIs. The 2011 RECPP, as approved by the
21 Commission, authorized a UFI of \$2.00 per watt, not to exceed 50% of Total System
22 Cost. The incentive amount is calculated at the time the application is approved for
23 reservation, but is subject to change based on the actual System Size and Total System
24 Costs submitted upon completion of the installation.

1 **Q. How are the UFI's funded?**

2 A. Each year, TEP submits an implementation plan as a roadmap for how the Company
3 intends to comply with the Renewable Energy Standard and Tariff ("REST") rules. The
4 plan contains a total budget necessary to fund all of the renewable energy programs and
5 associated expenses. Commission Staff will review the implementation plan and it is
6 ultimately approved by the Commission. When the final budget is set, specific
7 volumetric rate surcharges are calculated for each customer class, with a maximum cap in
8 each class. Customers are billed this surcharge each month and the Company utilizes
9 those funds to support its renewable programs as approved in its implementation plan.
10 Residential UFIs, as contained in the RECPP, is a program that is funded through the
11 ratepayer REST surcharge.

12
13 **Q. What is the purpose of incentives received through the RECPP program?**

14 A. The purpose of the incentive is two-fold. One, it provides financial assistance to the
15 customer in installing residential solar. Two, it provides a mechanism to allow the
16 Company to acquire the Renewable Energy Credits ("RECs") necessary to comply with
17 the Renewable Energy Standard established by the Commission's rules.

18
19 **Q. What are the qualifications for an installer of Residential Solar Electric Systems?**

20 A. The Installer Qualifications contained within the 2011 RECPP (Exhibit A) are as follows:

21 All systems receiving incentives under the RECPP must be installed by a
22 qualified installer. The following requirements must be submitted by the
23 applicant as part of the reservation request. TEP will verify that the installer
meets the following minimum qualifications prior to confirming a
reservation request:

- 24 1. The installer must possess a valid license on file with the Arizona Registrar
25 of Contractors ("AZROC") with a license classification appropriate for the
26 technology being installed. Alternatively, the installer must identify use of
27 a contractor holding an appropriate license on file with the AZROC for the
technology being installed. A copy of the AZROC license must be
provided as part of the reservation request.

1 2. The installer must possess an Arizona business license that is active and in
2 good standing.

3 Installers may request that the above information be retained on file with
4 TEP; however, under this option the installer must certify that the
5 information on file remains current with the submission of each reservation
6 request. Information on file must be renewed yearly.

7 In this case, the Complainant submitted a reservation request that stated that Technicians
8 for Sustainability ("TFS") were to be his installer. TFS is a qualified installer under the
9 above outlined requirements and has such information retained on file with TEP.
10 Additionally, at the time TEP received the Reservation Request, it reflected that TFS was
11 the installer and that this would not be a self-installation. (Exhibit B)

12 The Commission approved 2011 RECPS is silent on UFI for Self-installed Residential
13 Solar Electric Systems, which is a noticeable change from the 2010 RECPS (Exhibit C).
14 In 2010 the RECPS had a separate section below the Installer Qualification Section
15 entitled: Installations by Customer (Residential Solar Electric and Wind Only), which is
16 stated below:

17 Residential customers may self-install Solar Electric systems 10 kW ac or
18 smaller providing they adhere to all applicable codes and standards. The
19 customer-installed systems are eligible for an incentive equal to 70% of the
20 standard UFI, as otherwise listed in Table 1, above. TEP reserves the right
21 to withdraw this self-install qualification condition at any time in the future
22 if TEP finds self-installations are not adhering to the applicable codes and
23 standards or are found to be of poor quality workmanship.

24 For the 2011 RECPS, the Company chose not to offer incentive options for self-install for
25 the reasons stated above. The removal of this provision was approved by the
26 Commission. Additionally, even had this provision been included in the 2011 RECPS,
27 the Complainant's 18.4 kW system would not have qualified for a UFI because 10 kW
 was the maximum size allowed. Therefore, the Complainants claim for additional
 incentives relating to such self-incurred costs is not justified under the Commission-
 approved RECPS.

1 **Q. Please discuss the Complainant's application for a UFI.**

2 A. A Reservation Request was filed online for an 18,330 watt (18.33kW) system, to be
3 installed by TFS, with a \$2.00 per watt on July 20, 2011. After the Reservation Request
4 was reviewed, TEP drafted and sent to the qualified installer an official Reservation
5 Packet that included the Reservation Request a Residential Renewable Energy
6 Application Package Coversheet ("Application Coversheet"), an Up Front Incentive
7 Renewable Energy Credit Purchase Agreement ("REC Purchase Agreement"), and an
8 Assignment of Payment form (Exhibit D). On July 26, 2011, TEP received a completed
9 Reservation Packet that included the Complainants signatures and initials.

10
11 The Application Coversheet was dated July 20, 2011, included the customer's name and
12 address, as well as stated his installer would be TFS. Both the Complainant and a
13 representative for TFS initialed all the required fields on the Application Coversheet,
14 including the following points:

15
16 *An Application for the above address has been submitted to TEP online.*
17 *This outlines the installer's intentions for the above renewable project.*
18 *This application tells TEP how much money to reserve. If the installer*
chooses to increase the system size, only the amount reserved will be
incented. . .

19 *A completed Assignment Payment form*
20 *TEP requires this document if the incentive is to be paid to a third party. .*
21 *. Changes to the Assignment of Payment after submission cannot be made.*

22 The Assignment of Payment assigned the incentive payment to TFS and was signed by
23 the Complainant and dated for July 21, 2011.

24
25 **Q. How many Certificates of Completion ("COC") are normally submitted for**
26 **completed installations?**

27 A. One

1 **Q. How many COCs did Technicians for Sustainability submit on behalf of the**
2 **Complainant? Please explain.**

3 A. Four. TFS submitted all of them. TEP does not, nor has ever paid incentives for cost
4 submitted by multiple sources. So, while it is highly unusual, in fact unheard of, to have
5 so many revised COCs submitted, TFS was the appropriate entity to file them, and why
6 TEP was at first willing to work with them through these unusual circumstances.

7
8 **Q. Would you please explain to the best of your understanding why TFS submitted so**
9 **many COCs?**

10 A. TEP received the first COC on December 23, 2011 (Exhibit E), which stated the Total
11 System Size at 18.72kW and the Total Cost at \$63,040. Because the Total System Size
12 was inconsistent with the Reservation Request, TEP contacted TFS to verify the amount.
13 TFS sent a 2nd COC on December 29, 2011 (Exhibit F, also dated December 23, 2011)
14 clarifying that the Total System Size was in fact 18.40kW, which was still bigger than the
15 Reservation Request. It is not uncommon for there to be a de minimus difference
16 between reserved and actual capacity due to changes in module selection and system
17 configuration; therefore it is common for TEP to waive that portion of the rule that does
18 not allow for payment above capacity stated on Reservation Request. The 3rd COC was
19 submitted on January 3, 2012 (Exhibit G, also dated December 23, 2011) by TFS, which
20 included additional costs submitted to TFS by the Complainant, bringing the Total Cost
21 to \$65,088, with a Total System Size of 18.4kW. Because the approved 2011 RECPP
22 allowed for an incentive of \$2.00 per watt or up to 50% of the Total Cost, TEP's
23 computer system calculated the appropriate incentive of 50% of the Total Cost or
24 \$32,544. TEP processed that payment on January 4, 2012 – 3 COCs later and 11 days
25 after receiving the initial COC.

1 On January 5, 2012, TFS contacted TEP again to inform us that the Complainant had
2 contacted them after TFS had informed him of their submittal of the COC. TFS stated
3 that they yet again needed to submit a revised COC, but that they understood if TEP
4 couldn't make the corrections to the rebate. TFS did not send the 4th COC until January
5 24, 2012 (Exhibit H also dated December 23, 2011). The 4th COC stated the Total
6 System Size was still 18.4kW, but claimed Total Costs of \$73,381.

7
8 **Q. Why did the Complainant's incentive request draw so much attention by TEP?**

9 A. This account was initially flagged for further review because of the multiple COCs
10 submitted to TEP, something that has never occurred before. However, there were
11 multiple COCs submitted, an occurrence that warrants automatic review in our
12 department, in addition to the final claimed Total Costs of almost \$8,300 more than the
13 previous COCs that led to my further investigation into the matter. It is rare that as a
14 Director I get involved in customer applications; however, as additional information
15 became available, it became apparent that there were significant discrepancies and
16 inconsistencies with this application.

17
18 As previously discussed, the funds for the renewable energy programs, including the
19 UFI's through RECPP, do not belong to the Company's shareholders. As TEP is the
20 steward of our ratepayer's money, along with meeting the State's renewable energy
21 standard, we have a fiduciary duty to ensure that those monies are spent in the most cost
22 effective manner and accordance with Commission approved rules and programs.

23
24 **Q. When did the Company process the Complainant's COC and issue payment of the
25 incentive? Please explain.**

26 A. Acting on the information we had received from the COCs submitted by TFS (costs
27 incurred by a qualified installer), TEP processed the incentive payment on January 4,

1 2012 and issued an incentive check to TFS for \$32,544 on January 9, 2011, in accordance
2 with the Assignment of Payment). According to the Complainant, TFS endorsed the
3 check to him; however his banking institution was unwilling to accept the check. Under
4 these unusual circumstances, and with the approval of TFS, TEP made an exception for
5 the Complainant and reissued the incentive check in the Complainant's name on February
6 27, 2011. The Complainant subsequently cashed the check.

7
8 **Q. When did the Complainant contact the Company directly to dispute the amount of**
9 **incentive that was paid?**

10 **A.** The Complainant initially contacted TEP directly on or about February 15, 2012. During
11 the communications that followed, the Complainant explained that while TFS was the
12 qualified installer for the installation, he himself was subcontracting out for some of the
13 work. Until this time, the Complainant had never before disclosed that there would be
14 additional work and costs accumulated from multiple sources. Because there was such a
15 large discrepancy between the Total Costs claimed by TFS in the initial COCs and the
16 Total Costs included in the 4th COC, it was necessary for us to investigate into the these
17 claimed additional costs. We therefore asked the Complainant to supply us an outline of
18 these additional costs, to which we further clarified that we would require invoices. The
19 Complainant provided a brief description of claimed additional expenses and attached a
20 self-made spreadsheet with the charges for his self-installation. He did not provide any
21 actual invoices from subcontractors used (Exhibit I).

22
23 **Q. Did you learn anything else about the Total Cost of the Complainant's System**
24 **during this time?**

25 **A.** Yes, it was during these exchanges in February, that the Complainant disclosed to us that
26 he had settled a payment dispute with TSF, which reduced his payment to them by
27 \$8,035. This would have reduced the Total Cost submitted by TFS in the second and

1 third COC from \$65,088 to \$57,053. According to TEP's calculations, 50% of the Total
2 Cost of \$57,053 is \$28,526.50; \$4,017.50 more than the \$32,544 incentive that the
3 Complainant has already received.

4
5 **Q. If both you and the Complainant agree that the Complainant's cost to TFS was**
6 **reduced by \$8,035, how does the Complainant attempt to justify his assertion that**
7 **his Total Cost is \$73,381 and request for an additional incentive payment?**

8 **A.** The Complainant is including in the Total Cost \$16,328 of additional self-installation
9 costs for services not performed by a qualified installer; which, as discussed above, are
10 not permitted under the RECPP. We both agree that the costs asserted by TFS were
11 \$65,088 minus \$8,035 payment reduction, if you then add the \$16,328, the total is
12 \$73,381.

13
14 **Q. Did you read the affidavits from Mr. Parish and Mr. Caffall that were included in**
15 **the Complainant's pre-filed testimony?**

16 **A.** Yes.

17
18 **Q. Can you please explain your understanding of Mr. Parish's residential solar**
19 **system?**

20 **A.** After reading the Complainant's testimony, I reviewed the application submitted for Mr.
21 Parish's system; the Reservation Request stated that TFS was the installer and it was not
22 a self-installation, the same as the Complainant's Reservation Request. Additionally, our
23 records indicate that TFS submitted one COC upon completion of Mr. Parish's
24 installation, and TEP paid an incentive based on that COC. (Exhibit J) All of the
25 documents submitted to TEP by Mr. Parish or TFS indicate that TFS acted as the
26 qualified installer.

1 **Q. Can you please explain your understanding of Mr. Caffall's residential solar**
2 **system?**

3 A. Because of the age of Mr. Caffall's system, the documentation associated with his system
4 has been archived. We are currently in the process of recalling those documents. When
5 we have had an opportunity to review those documents, based on that review, the
6 Company may submit an additional exhibit.

7
8 **Q. Mr. Tilghman, do you believe that TEP owes the Complainant an additional**
9 **incentive?**

10 A. No. First, the Complainant has already received a benefit of \$32,544 and a reduction to
11 his TFS payment. Second, the incentive was paid based off of the qualified installer's
12 (TFS's) submitted COC, that included the Total Cost of \$65,088 for costs incurred.
13 Third, while TEP did in the past offer some incentives for self-installed systems, the 2011
14 RECPP that was approved by the Commission did not provide for incentives to be
15 provided for self-installations, nor has TEP ever paid for costs incurred and submitted by
16 multiple sources. Finally, the Complainant did not initially disclose there would be self-
17 installation costs, which would have been denied. Therefore, the \$16,328 was not
18 eligible to be included in the Total Costs.

19
20 **Q. In light of your above testimony, why did you issue a check for \$4,256 to TFS?**

21 A. I normally do not get involved in individual transactions until they are raised to my level.
22 My staff and I wanted to be helpful to the customer in this very unusual situation,
23 however, upon further review and investigation, we determined there were too many
24 anomalies which caused us to re-examine the \$4,256 additional payment to TFS. Once
25 we had adequate time to investigate and all the facts had been uncovered, we realized that
26 the Complainant's claimed costs were not eligible and we were concerned that the
27 Complainant had been overly compensated with what is ratepayer REST money. In order

1 to rectify this error, prudence required us to ask that that the check be returned to the
2 Company.

3 **Q. Mr. Tilghman, why has the Company elected to litigate this matter for only \$4,256?**

4 A. What is important to recognize is that this is not TEP shareholder money, but it is money
5 that comes from TEP ratepayers for incentives to other TEP ratepayers to provide
6 financial assistance for solar systems. As I said previously, TEP has an obligation to
7 ensure that such money is distributed pursuant to the RECPP approved by the
8 Commission. Under the facts and circumstances outlined above, we felt that it was
9 important to demonstrate to the Commission and our ratepayers that fund this program,
10 that we take our obligations very seriously and that will only pay incentives where all of
11 the requirements are met.

12
13 **Q. Does this conclude your testimony?**

14 A. Yes.
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Exhibit A

2011 RECPP

Solar Electric: Residential Projects 20 kW AC (28.4 kW DC) or Less and Non-Residential Projects 50 kW AC (71 kW DC) or Less

INCENTIVE LEVELS FOR RESIDENTIAL SOLAR ELECTRIC SYSTEMS AND NON-RESIDENTIAL SYSTEMS 50 kW AC OR LESS

Residential Solar Electric systems and Non-Residential Solar Electric systems 50 kW AC or less are eligible for UFIs. UFIs are those incentives where the customer receives a one-time payment based on the system's designed capacity.

Table 1 identifies the incentives available for Residential Solar Electric systems and Non-Residential Solar Electric systems 50 kW AC or less.

Table 1. Up-Front Incentives (\$/Watt) for On-Grid Residential Smaller than 20 kW AC, On-Grid Non-Residential 50 kW AC or Less, and Off-Grid Solar Electric Systems

YEAR	RESIDENTIAL	SMALL NON-RESIDENTIAL	OFF-GRID
2011	\$2.00/W DC	\$1.50	\$2.00

Notes:

- On-Grid Residential customers will receive a UFI up to a cap of 20 kW AC (28.4 kW DC). If a residential system is installed larger than 20 kW AC, TEP will only provide an incentive payment for the first 20 kW AC.
- On-Grid Small non-residential customers will receive a UFI up to a cap of 50 kW AC (71 kW DC). If a small non-residential system is installed larger than 50 kW AC, it must apply under the large non-residential program.
- Off-Grid customers, residential or non-residential, will receive a UFI up to a cap of 4 kW AC.
- The UFI may not exceed 50% of Total System Cost.
- The customer must pay at least 15% of the project cost, after other government incentives (e.g., tax credits) are considered. (See explanation of incentive calculation below.)
- Systems may not be eligible to receive RECPP incentives if other utility incentives are applied.
- As described later in this document, these incentive levels may be decreased because of sub-optimal system positioning.

The incentive amount will be calculated at the time the application is approved for reservation. If federal or state incentives change during the period of time after the reservation approval, the incentive amount reserved will not be changed as long as the reservation is not cancelled.

In return for TEP's payment of a UFI, TEP will be given complete and irrevocable ownership of the RECs until December 31st of the 20th full calendar year after completion of installation of the system. Operational life during that time frame must be supported by system warranty or planned maintenance schedules.

PROJECT FUNDING

Funds will be made available for reservations on a first-come, first-reserved basis, until annual funding is fully reserved. Reservations which are rejected as a result of insufficient funds will be placed on a waiting list and offered the opportunity to retain their original reservation date for one additional quarter without the need to resubmit application documentation. If the incentive level has changed from the date of the original reservation to the date when the reservation is approved, the new incentive level shall be applied.

Incentive levels will be reduced using a compliance trigger mechanism. If TEP has reached 60% of its annual REST compliance on or before June 30, 2011, the incentive levels will be reduced based Table 2. If TEP has not reached 60% by June 30, 2011 the incentive levels would not be reduced automatically in 2011. If the trigger is reached, TEP will make public that the incentive levels will be reduced approximately 30 days after the trigger has been achieved. The trigger is a mechanism to protect the industry by helping to ensure that money is still available for the duration of the year.

Table 2: Decreased Incentives Based on Compliance Trigger for Up-Front Incentives

YEAR	RESIDENTIAL	SMALL NON-RESIDENTIAL	OFF-GRID
2011	\$1.75/W DC	\$1.25/W DC	\$2.00/W DC

TEP will allocate funds to all qualifying technologies applying for residential and non-residential incentives. Non-PV categories may be protected from over spending in PV at the discretion of TEP Program Managers. This would most likely be a 10% carve out for technologies other than PV for both classes of projects.

NET METERING

RECPP incentives can be applied to systems designed to serve only the typical load of the customer with whom the incentive agreement has been established. The assessment of that typical load does not preclude the periodic production of electricity in excess of the customer's demand. All projects must comply with ACC net metering rules.

PROJECT REQUIREMENTS AFTER INSTALLATION

After completing the installation of a Residential Solar Electric project or Non-Residential Solar Electric project 50 kW AC or less, the customer must continue to provide information to TEP about the system's performance.

All customer systems receiving renewable energy self-generation incentives are obligated to include a TEP-supplied production meter, which will report system production to TEP in accordance with the regular meter-reading schedule. TEP, at its option, may perform periodic inspection of the system for operation, metered production, and reporting purposes.

THE FINE PRINT

In addition to the other requirements described in this hand book, there are two other types of program details of which system owners and installers should be aware:

1. Installer qualifications
2. System removal

These are described in further detail below.

Installer Qualifications

All systems receiving incentives under the RECPP must be installed by a qualified installer. The following requirements must be submitted by the applicant as part of the reservation request. TEP will verify that the installer meets the following minimum qualifications prior to confirming a reservation request:

1. The installer must possess a valid license on file with the Arizona Registrar of Contractors ("AZROC") with a license classification appropriate for the technology being installed. Alternatively, the installer must identify use of a contractor holding an appropriate license on file with the AZROC for the technology being installed. A copy of the AZROC license must be provided as part of the reservation request.
2. The installer must possess an Arizona business license that is active and in good standing.

Installers may request that the above information be retained on file with TEP; however, under this option the installer must certify that the information on file remains current with the submission of each reservation request. Information on file must be renewed yearly.

System Removal

If receiving a UFI, neither the Qualifying System nor any components thereof shall be removed from the premises (by either the applicant or future owners or occupants of the property) until December 31st of the 20th full calendar year following completion of system installation of the renewable energy system, without express agreement of TEP. If the Qualifying System is removed by any party in violation of this provision, customer shall immediately reimburse TEP all incentive amounts paid by TEP to customer or on behalf of customer to an authorized third party.

In addition, if a Qualified System is removed, TEP shall monitor that specific customer site to ensure that an additional incentive is not provided for any new distributed renewable energy resource system on that site until the Renewable Energy Credit ("REC") contracted operational life of the original system has been completed.

ATTACHMENT A
System Qualifications for Residential Solar Electric Projects and
Non-Residential Solar Electric Projects 50 kW AC or Less

All solar electric generating Customer Systems must meet the following system and installation requirements to qualify for Tucson Electric Power Company's ("TEP" or the "Company") Renewable Energy Credit Purchase Program ("RECPP"). Capitalized terms not defined herein shall have the meanings ascribed to them in the RECPP Agreement.

The following equipment qualifications listed are mandatory requirements which must be met at the time of project commissioning to receive a RECPP incentive. The installation guidance is intended to provide consumers with information on installation and operation practices which are most likely to support achieving the system's designed output. Installation guidance is mandated in order for a project to receive a RECPP incentive, as it does reflect both industry and TEP concurrence on those practices which are important for a technology to best achieve the designed output. In the future, additional installation guidance items may be considered for inclusion as part of the equipment qualifications.

TEP acknowledges that many regulations and site-specific requirements may apply to the installation of renewable energy technologies. TEP agrees that no requirement imposed by these technology criteria shall be imposed in conflict with any other governmental requirements. Any RECPP-based requirement, which is in conflict with a site-specific governmental requirement, shall be detailed in the reservation request. All qualifying systems must adhere to the following requirements in addition to the RECPP program requirements:

Equipment Standards

1. The Customer System components must be certified as meeting the requirements of IEEE-929 - Recommended Practice for Utility Interface of Photovoltaic Systems.³
2. Photovoltaic components must be certified by a nationally recognized testing laboratory as meeting the requirements of UL-1703 - Standard for Flat Plate Photovoltaic Modules and Panels Systems and be covered by a non-prorated manufacturer's warranty of at least 20 years.
3. The inverter must be certified as meeting the requirements of IEEE-1547 - Recommended Practice for Utility Interface of Photovoltaic Systems, and it must be UL-1741 certified. Inverters must be covered by a manufacturer's warranty of at least ten years.
4. The Customer System design and installation must meet all requirements of the latest edition of the National Electrical Code, including Article 690 and all grounding, conductor, raceway, over-current protection, disconnect and labeling requirements.
5. All other electrical components must be UL listed.

³ Some technology-specific criteria reference third party standards. The requirements of those standards are fully applicable when referenced as part of technology specific criteria. TEP recognizes that new standards are likely to develop in the near future for technologies included in the RECPP, and recommends that the new standards are examined for application in this program definition as they become available.

6. The Customer System and installation must meet the requirements of all federal, state and local building codes and have been successfully inspected by the building official having jurisdiction. Accordingly, the installation must be completed in accordance with the requirements of the latest edition of National Electrical Code in effect in the jurisdiction where the installation is being completed (NEC), including, without limitation, Sections 200-6, 210-6, 230-70, 240-3, 250-26, 250-50, 250-122, all of Article 690 pertaining to Solar Photovoltaic Systems, thereof, all as amended and superseded.
7. The Customer System must meet Company and Arizona Corporation Commission interconnection requirements for self-generation equipment.
See <http://images.edocket.azcc.gov/docketpdf/0000074361.pdf> for these requirements.

Installation requirements

1. A grid-connected Residential Customer System must have a total solar array nameplate rating of at least 845 watts AC (1,200 watts DC) and no more than 20,000 watts AC (28,400 watts DC).
2. The Customer System installation must meet the TEP Service Requirements 2010 Edition, Page 1.20, as follows:

"AN AC DISCONNECT MEANS SHALL BE PROVIDED ON ALL UNGROUNDED AC CONDUCTORS and SHALL CONSIST OF A LOCKABLE GANG OPERATED DISCONNECT CLEARLY INDICATING OPEN OR CLOSED. THE SWITCH SHALL BE VISUALLY INSPECTED TO DETERMINE THAT THE SWITCH IS OPEN. THE SWITCH SHALL BE CLEARLY LABELED STATING "DG SERVICE DISCONNECT."
3. The utility meter and utility disconnect will be installed in a location readily accessible by TEP at all times.
4. Products must be installed according to manufacturers' recommendations.
5. The Customer System photovoltaic panels and modules must face within +/- 100 degrees of true south, and be substantially unshaded from 9 am to 3 pm. System arrays which are facing at an azimuth angle of more than 20 degrees from true south or shaded for more than one hour per day will be subject to a reduced amount of buydown payment per Attachment B.
6. The Customer System photovoltaic panels and modules must be fitted at an angle of 0 degrees to 60 degrees from horizontal. System arrays which are fitted with an elevation angle of less than 20 degrees or more than 35 degrees above horizontal will be subject to a reduced amount of buydown payment per Attachment B.
7. For Residential Customer Systems, Company shall furnish a meter, meter socket, and AC disconnect switch in accordance with TEP SR-122 service requirements. Company shall install the meter. For Non-Residential customer systems, Company shall furnish and install the meter only. The meter socket and AC disconnect shall be installed in accordance with TEP SR-122 service requirements. Installer must notify TEP of wiring configuration so that Company may provide the appropriate 3-phase meter.

8. Total voltage drop on the DC and AC wiring from the furthest PV module to the AC meter will not exceed 2%.
9. PV panels and DC to AC inverter will be installed with sufficient clearance to allow for proper ventilation and cooling. At a minimum, manufacturer clearance recommendations will be observed. PV modules may be mounted less than 4 inches above any surface and an additional inch of clearance for each foot of continuous array surface area beyond four feet in the direction parallel to the mounting support surface, only in cases when arrays are flush-mounted to roof pitch. Otherwise, the four-inch spacing and an additional inch of clearance for each foot of continuous array surface area minimum is required.
10. Storage Batteries are not allowed as part of the Customer System unless the inverter is a separate component and TEP can locate the Solar Meter at the inverter's output. If configured otherwise, battery losses will adversely reflect in the annual AC metered energy output. Customer's solar energy generation and energy storage system must meet the requirements of 2 and 3 of this Attachment A.
11. The DC to AC inverter used must provide maximum power point tracking for the full voltage and current range expected from the photovoltaic panels used and the temperature and solar insolation conditions expected in Tucson, Arizona.
12. The DC to AC inverter must be capable of adjusting to "sun splash" from all possible combinations of cloud fringe effects without interruption of electric production.
13. TEP reserves the right to modify standards as technology changes on a case by case basis, pending independent laboratory analysis, Professional Engineer ("PE") stamp, or TEP engineering analysis.

General Requirements

1. All Customer System installations must be completed in a professional, workmanlike and safe manner.
2. Installation must have been made after January 1, 1997.
3. The Customer must be connected to the Company's electric grid, except for approved off-grid systems in conformance with the RECPP.
4. Systems must be permitted and inspected by the jurisdiction having authority over construction projects in the customer's locale.
5. The project must comply with applicable local, state, and federal regulations.
6. Products must be installed according to manufacturers' recommendations.
7. Installations must meet applicable governmental statutes, codes, ordinances, and accepted engineering and installation practices.
8. All major system components must be new and must not have been previously placed in service in any other location or for any other application.

9. All renewable electricity generation systems must include a dedicated performance meter (provided by TEP) which allows for measurement of system energy production. Certain other non-electric renewable energy production systems will require customer supplied metering for Performance Based Incentive ("PBI") payment calculation purposes.
10. PV system components shall be properly labeled, including AC & DC disconnects (if present), solar generation meter, service panel (outside cover), and breakers inside the service panel.
11. The system will in all cases have a material and full labor warranty of at least five years.

Additional Requirements for Off-Grid Systems

1. The minimum Solar Electric array size shall be no less than 422 watts AC (600 watts DC). The maximum Solar Electric array size for customers currently paying into the REST tariff shall not exceed 4,000 watts AC (5,680 watts DC). For customers not currently paying into the REST tariff, systems shall not exceed 2,000 watts AC (2,840 watts DC).
2. Off-grid systems will not be metered. Compliance reporting production will be based on an annual 20% capacity factor using nameplate DC rating for capacity.

Exhibit B

Renewable Customer Application Details Zone**Customer Information**

Account Id: **6327758082**
Status: **APPD**
Remarks **Case (7109279427) has been successfully created for the staging record.**
Person Id: **4037887717**
Name: **PATZKE, THOMAS A**
Premise Id: **9095316179**
Street Address: **12951 N TAILWIND DR**
City: **TUCSON**
Mailing Address: **12951 N Tailwind Dr**
City: **Tucson**
Daytime Phone Number:
Email Address: **kpatzke@aol.com**
Operating Agent:
Date Input: **2011-07-20**
RE Program: **Residential Solar Electric On Grid**

System Information

Module Supplier Name: **Technicians for Sustainability**
Module Manufacturer: **Schott**
Module Type: **235**
Quantity of Modules: **78**
Inverter Make and Model Number: **Fronius IG Plus 7.5 and Fronius IG Plus 10.0**
Nameplate DC Rating in Watts (per Module): **235**
Estimated System Size in Watts (Calculated): **18330**
Module Warranty (Yrs): **25**
Inverter Warranty (Yrs): **10**
REC Multiplier: **1**

Project Cost

Equipment/PV Cost: **66724.00**
Labor Cost: **18330.00**
Finance Cost: **18330.00**
Total Installed Cost: **85054.00**

Project Information

Estimated Installation Date: **11-01-2011**
Is this application for Net Metering?: **Yes**
Is this Solar System a BIPV (integral to roofing materials)?: **No**
Is this a self-installation?: **No**
System design meets REST Interconnection requirements?: **Yes**

Applied for City/County Permit?: **Yes**
Date City/County Clearance Received (Office Use Only):
Customer authorizes periodic inspections?: **Yes**
Rebate Processing (UFI/PBI): **UFI**
Assignment of Payment (Y/N): **Yes**
Person ID for the Assignment of Payment **3972268274**
Name: **TECHNICIANS FOR SUSTAINABILITY**
Street:
City:
State:
ZipCode:
Installer ID **3972268274**
Installer/Dealer Name: **TECHNICIANS FOR SUSTAINABILITY**
Street: **PO Box 1109**
City: **Tucson**
State: **AZ**
ZipCode: **85702**

UFI/PBI Incentive Calculation

System Size in Watts: **18330**
Incentive Amount per Watt: **2.00**
Estimated Incentive: **36660.00**
Incentive Reservation: **36660.00**
Estimated Final UNS Incentive Amount For Payment: **36660.00**

Exhibit C

2010 RECCP

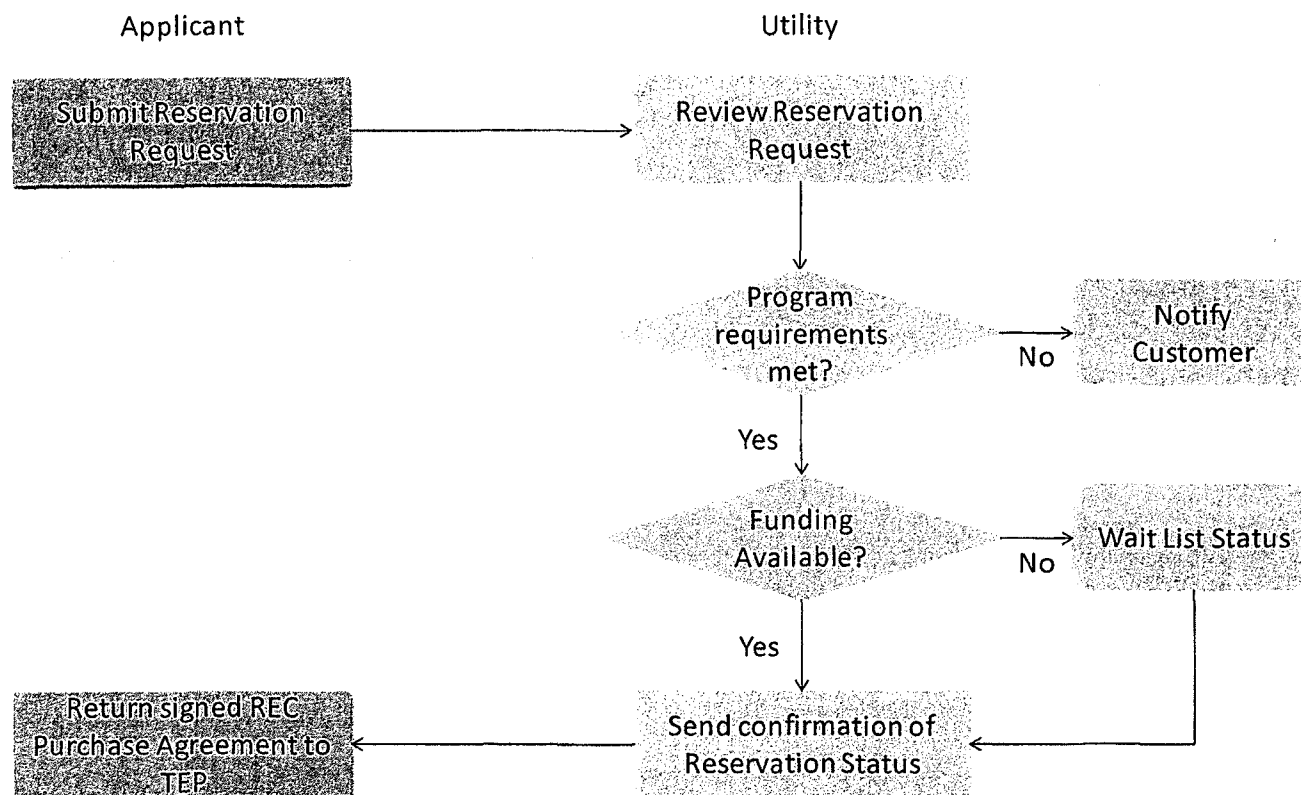
Solar Electric: Residential Projects Smaller Than 20 kW and Commercial Projects Smaller Than 100 kW

Tucson Electric Power Company ("TEP" or the "Company") is committed to assisting our customers in developing their own renewable generation resources, through a balanced and supportive renewable energy distributed generation incentive program. Our goal is to create a program that will provide incentives for affordable, environmentally sensitive, customer-sited renewable energy generation systems to supplement TEP customer's energy needs. A properly designed system, matched to a customer's energy use, will provide a reduction in utility bills through the use of renewable resources. This program reflects our commitment to reduce the cost of developing renewable energy resources.

PROCESS FOR OBTAINING INCENTIVES

The process for obtaining incentives from TEP involves the flow of information between the applicant and TEP. The following sections reflect the typical three-step process.

Step 1 – Reservation Request and Assignment of Reservation Status



The applicant must first submit the reservation request to TEP.¹ The reservation request includes information about the TEP customer on whose property the system will be located, the Solar Electric system, the calculation of the incentive, and the installer of the system.

¹ Off-grid projects would submit a different version of the reservation request.

Residential Projects and Commercial Projects Smaller Than 100 kW

TEP will review the reservation request to ensure the application conforms to program requirements.

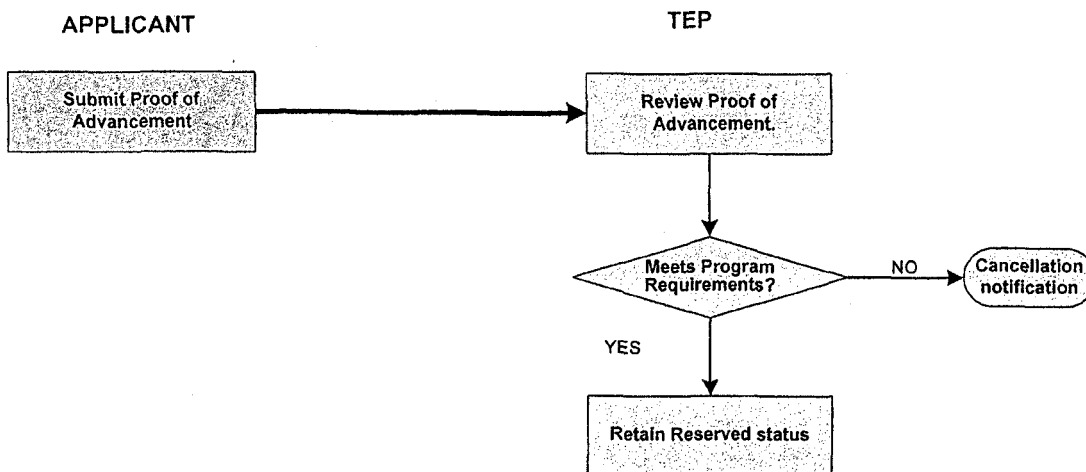
- Reservation requests for residential systems and commercial systems smaller than 100 kW are processed on a first-come, first-reserved basis.
- Reservation requests for residential systems and commercial systems smaller than 100 kW will be reviewed within 30 days of the utility's receipt of the request.

If the reservation request is approved, TEP will send a confirmation to the applicant. A reservation request may be denied for two different reasons, each with its own consequences:

- The reservation request may be denied because the request is not in compliance with program requirements. In this case, TEP will send notification to the applicant of the discrepancies and put the reservation in a "pending" status. The installer will have 14 days to provide the documentation required.
- The reservation request may be denied because it is not in conformance with program requirements. In this case, TEP will send notice that the request is cancelled.
- The reservation request may be denied because funding is not available. In this case, TEP will send a notification to the applicant that the request will be placed on a waiting list.

After reviewing the reservation request, TEP will assign a reservation status.

Step 2 – Proof of Advancement



Applicants for residential systems and commercial systems smaller than 100 kW must submit proof of project advancement to TEP within 60 days of the date of reservation confirmation from TEP to retain the reservation. Applicants for residential systems and commercial systems smaller than 100 kW must provide copies of city/county inspection permits to TEP as documentation of the proof of project advancement. If those permits are not available within 60 days of the date of reservation confirmation, the applicant may also provide these documents in place of the permits:

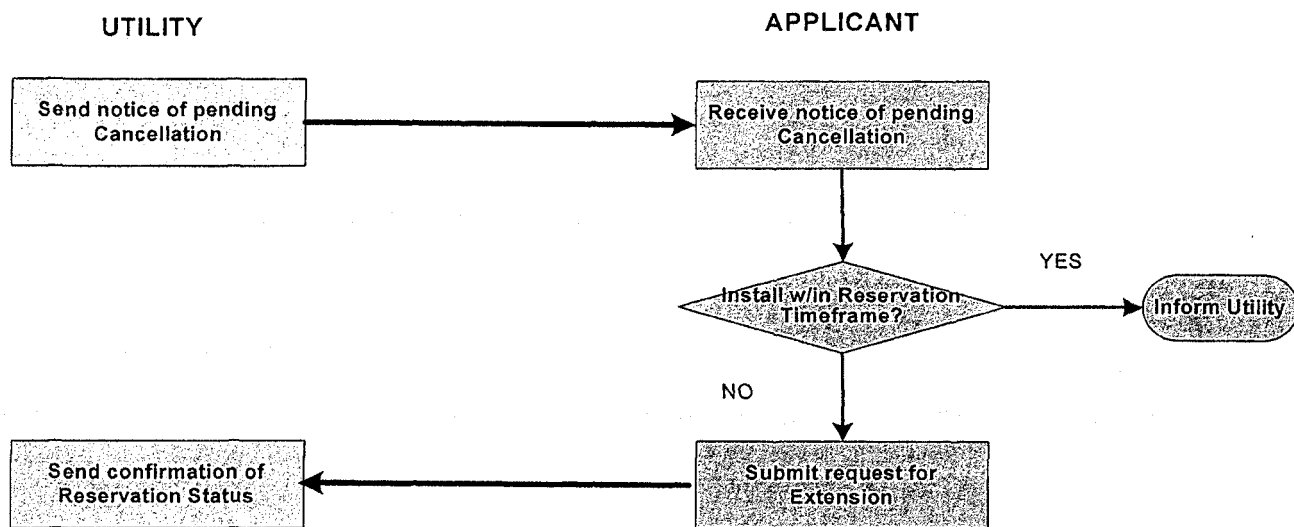
- Signed agreement
- Assignment of Payment form

Residential Projects and Commercial Projects Smaller Than 100 kW

- Initial city/county-permit application or actual receipt of final acceptance inspection paperwork from the city/county.

If proof of project advancement is not received within the specified timeframe, the applicant will be notified that the reservation is cancelled. The applicant has the option to reapply for funding after the reservation has been cancelled. The request will be processed in the same manner as a new project reservation and will be contingent upon availability of funding at the time the new application is received.

Conditional Step – Extension / Cancellation

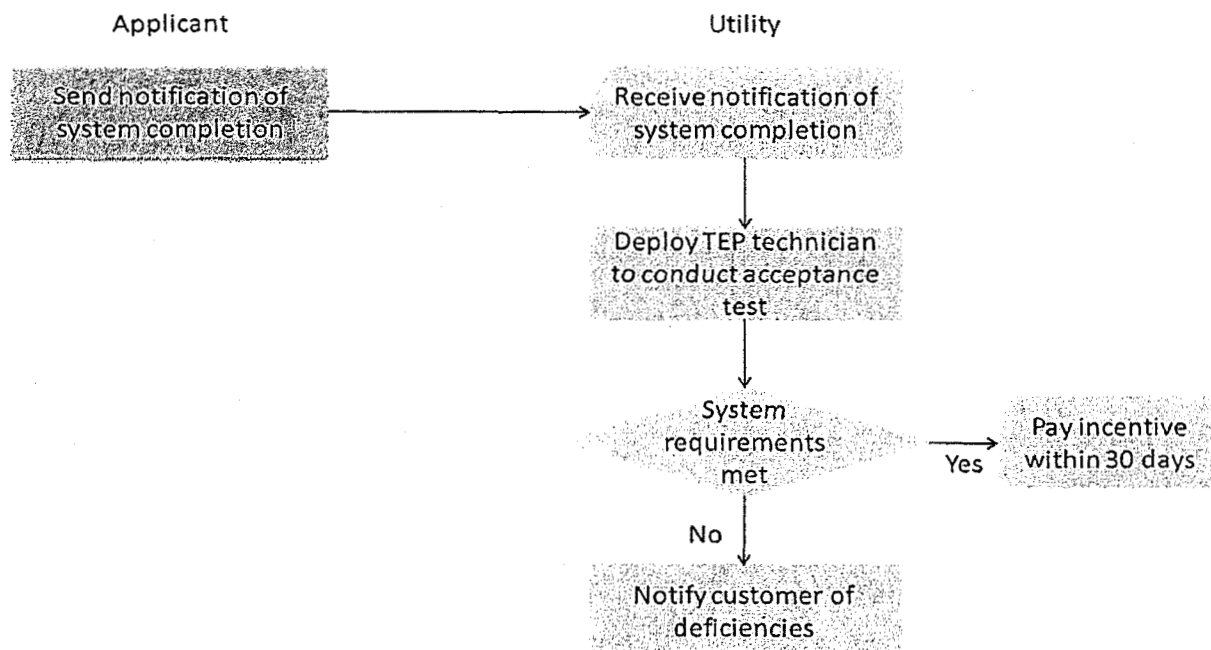


If all project requirements are not met within 180 days of the date of the reservation confirmation, the applicant must apply for an extension to remain eligible for the incentive. TEP will trigger this request for extension with a notice of the pending cancellation 30 days prior to the date of scheduled cancellation. TEP will grant an extension for up to 90 days following timely receipt of a customer's request for extension. TEP may approve written extension requests detailing the conditions for delay for periods beyond 90 days under extenuating circumstances.

If all program requirements have not been met within the reservation timeframe, a reservation request will be cancelled unless an extension is granted.

Residential Projects and Commercial Projects Smaller Than 100 kW

Step 3 – Customer Requests Payment



Upon project completion, the customer must notify TEP that the system has been placed in service. This should be done by submitting a copy of the city/county final inspection permit. When TEP receives notification that the system is complete, TEP will perform an “acceptance test.” The acceptance test requires that a TEP inspector test the system’s compliance with the required specifications and its performance and determine that it is in line with TEP requirements.

If the system meets TEP specifications and performance requirements, TEP will pay the customer the up-front incentive (“UFI”) within 30 days of the acceptance test. If the system fails to meet TEP specifications and performance requirements, TEP will notify the customer within 5 days of the acceptance test. The customer will then have 30 days to address the deficiencies and notify TEP that the system is ready to be retested.

INCENTIVE LEVELS FOR RESIDENTIAL SOLAR ELECTRIC SYSTEMS AND COMMERCIAL SYSTEMS SMALLER THAN 100 kW

Residential Solar Electric systems and non-residential systems smaller than 100 kW are eligible for UFIs. UFIs are those incentives where the customer receives a one-time payment based on the system’s designed capacity.

Table 1 identifies the incentives available for residential Solar Electric systems and non-residential Solar Electric systems smaller than 100 kW.

Residential Projects and Commercial Projects Smaller Than 100 kW

Table 1. Up-Front Incentives (\$/Watt) for On-Grid Residential Solar Electric Systems and OnGrid Non-Residential Solar Electric Systems Smaller Than 100 kW, and Off-Grid.

Year	Residential	Small- Commercial	Off-Grid
2010	\$3.00/W DC	\$2.50	\$2.00
2011*	\$3.00/W DC	\$2.50	\$2.00
2012*	\$3.00/W DC	\$2.50	\$2.00
2013*	\$3.00/W DC	\$2.50	\$2.00
2014*	\$3.00/W DC	\$2.50	\$2.00

Notes:

*Indicates that the incentive for that year has not yet been approved by the Arizona Corporation Commission (“ACC” or the “Commission”). As such, these incentives are tentative and may change pending Commission approval.

- On-Grid Residential customers will receive a UFI up to a cap of 20 kWac. If a residential system is installed larger than 20 kWac, TEP will only provide an incentive payment for the first 20 kWac.
- On-Grid Small commercial customers will receive a UFI up to a cap of 100 kWac. If a small commercial system is installed larger than 100 kWac, it must apply under the large commercial program.
- Off-Grid customers, residential or commercial, will receive a UFI up to a cap of 4 kWac.
- The UFI may not exceed 60% of total System Cost.
- The customer must pay at least 15% of the project cost, after other government incentives (e.g., tax credits) are considered. (See explanation of incentive calculation below.)
- Systems may not be eligible to receive RECPP incentives if other utility incentives are applied.
- As described later in this document, these incentive levels may be decreased because of sub-optimal system positioning.

The incentive amount will be calculated at the time the application is approved for reservation. If federal or state incentives change during the period of time after the reservation approval, the incentive amount reserved will not be changed as long as the reservation is not cancelled.

In return for TEP’s payment of a UFI, TEP will be given complete and irrevocable ownership of the RECs until December 31st of the 20th full calendar year after completion of installation of the system. Operational life during that time frame must be supported by system warranty or planned maintenance schedules.

PROJECT FUNDING

Funds will be made available for reservations on a first-come, first-reserved basis, until annual funding is fully reserved. Reservations which are rejected as a result of insufficient funds will be placed on a waiting list and offered the opportunity to retain their original reservation date for one additional quarter without the need to resubmit application documentation. If the incentive level has changed from the date of the original reservation to the date when the reservation is approved, the new incentive level shall be applied.

Residential Projects and Commercial Projects Smaller Than 100 kW

NET METERING

RECPP incentives can be applied to systems designed to serve only the typical load of the customer with whom the incentive agreement has been established. The assessment of that typical load does not preclude the periodic production of electricity in excess of the customer's demand. All projects must comply with ACC net metering rules.

PROJECT REQUIREMENTS AFTER INSTALLATION

After completing the installation of a residential Solar Electric project or commercial Solar Electric project smaller than 100 kW, the customer must continue to provide information to TEP about the system's performance.

All customer systems receiving renewable energy self-generation incentives are obligated to include a TEP-supplied production meter, which will report system production to TEP in accordance with the regular meter-reading schedule. TEP, at its option, may perform periodic inspection of the system for operation, metered production, and reporting purposes.

THE FINE PRINT

In addition to the other requirements described in this hand book, there are three other types of program details of which system owners and installers should be aware:

1. Installer qualifications
2. Customer-installed systems
3. System removal

These are described in further detail below.

Installer Qualifications

All systems receiving incentives under the RECPP must be installed by a qualified installer. The following requirements must be submitted by the applicant as part of the reservation request. TEP will verify that the installer meets the following minimum qualifications prior to confirming a reservation request:

1. The installer must possess a valid license on file with the Arizona Registrar of Contractors ("AZROC") with a license classification appropriate for the technology being installed. Alternatively, the installer must identify use of a contractor holding an appropriate license on file with the AZROC for the technology being installed. A copy of the AZROC license must be provided as part of the reservation request.
2. The installer must possess an Arizona business license that is active and in good standing.

Installers may request that the above information be retained on file with TEP; however, under this option the installer must certify that the information on file remains current with the submission of each reservation request. Information on file must be renewed yearly.

Residential Projects and Commercial Projects Smaller Than 100 kW

Installations by Customer (Residential Solar Electric and Wind Only)

Residential customers may self-install Solar Electric systems 10 kWac or smaller providing they adhere to all applicable codes and standards. The customer-installed systems are eligible for an incentive equal to 70% of the standard UFI, as otherwise listed in Table 1, above. TEP reserves the right to withdraw this self-install qualification condition at any time in the future if TEP finds self-installations are not adhering to the applicable codes and standards or are found to be of poor quality workmanship.

System Removal

If receiving a UFI, neither the Qualifying System nor any components thereof shall be removed from the premises (by either the applicant or future owners or occupants of the property) until December 31st of the 20th full calendar year following completion of system installation of the renewable energy system, without express agreement of TEP. If the Qualifying System is removed by any party in violation of this provision, customer shall immediately reimburse TEP all incentive amounts paid by TEP to customer or on behalf of customer to an authorized third party.

In addition, if a Qualified System is removed, TEP shall monitor that specific customer site to ensure that an additional incentive is not provided for any new distributed renewable energy resource system on that site until the Renewable Energy Credit ("REC") contracted operational life of the original system has been completed.

ADDITIONAL RESOURCES

The following resources provide information regarding system installation and performance forecasting:

The California Energy Commission's Guide to Buying a Photovoltaic Solar Electric System at http://energy.ca.gov/reports/2003-03-11_500-03-014F.PDF

The Arizona Consumers Guide to Buying a Solar Electric System at www.azsolarcenter.com/design/azguide-1.pdf

ATTACHMENT A
System Qualifications for Residential Solar Electric Projects and
Commercial Solar Electric Projects Smaller Than 100 kWac

All solar electric generating Customer Systems must meet the following system and installation requirements to qualify for Tucson Electric Power Company's ("TEP" or the "Company") Renewable Energy Credit Purchase Program ("RECPP"). Capitalized terms not defined herein shall have the meanings ascribed to them in the RECPP Agreement.

The following equipment qualifications listed are mandatory requirements which must be met at the time of project commissioning to receive a RECPP incentive. The installation guidance is intended to provide consumers with information on installation and operation practices which are most likely to support achieving the system's designed output. Installation guidance is mandated in order for a project to receive a RECPP incentive, as it does reflect both industry and TEP concurrence on those practices which are important for a technology to best achieve the designed output. In the future, additional installation guidance items may be considered for inclusion as part of the equipment qualifications.

TEP acknowledges that many regulations and site-specific requirements may apply to the installation of renewable energy technologies. TEP agrees that no requirement imposed by these technology criteria shall be imposed in conflict with any other governmental requirements. Any RECPP-based requirement, which is in conflict with a site-specific governmental requirement, shall be detailed in the reservation request. All qualifying systems must adhere to the following requirements in addition to the RECPP program requirements:

Equipment Standards

1. The Customer System components must be certified as meeting the requirements of IEEE-929 - Recommended Practice for Utility Interface of Photovoltaic Systems.²
2. The Customer System components must be certified as meeting the requirements of UL-1741 - Power Conditioning Units for use in Residential Photovoltaic Power and be covered by a non-prorated manufacturer's warranty of at least two years.
3. Photovoltaic components must be certified by a nationally recognized testing laboratory as meeting the requirements of UL-1703 - Standard for Flat Plate Photovoltaic Modules and Panels Systems and be covered by a non-prorated manufacturer's warranty of at least 20 years.
4. The inverter must be certified as meeting the requirements of IEEE-1547 - Recommended Practice for Utility Interface of Photovoltaic Systems, and it must be UL-1741 certified. Inverters must be covered by a manufacturer's warranty of at least ten years.

² Some technology-specific criteria reference third party standards. The requirements of those standards are fully applicable when referenced as part of technology specific criteria. TEP recognizes that new standards are likely to develop in the near future for technologies included in the RECPP, and recommends that the new standards are examined for application in this program definition as they become available.

Residential Projects and Commercial Projects Smaller Than 100 kW

5. The Customer System design and installation must meet all requirements of the latest edition of the National Electrical Code, including Article 690 and all grounding, conductor, raceway, over-current protection, disconnect and labeling requirements.
6. All other electrical components must be UL listed.
7. The Customer System and installation must meet the requirements of all federal, state and local building codes and have been successfully inspected by the building official having jurisdiction. Accordingly, the installation must be completed in accordance with the requirements of the latest edition of National Electrical Code in effect in the jurisdiction where the installation is being completed (NEC), including, without limitation, Sections 200-6, 210-6, 230-70, 240-3, 250-26, 250-50, 250-122, all of Article 690 pertaining to Solar Photovoltaic Systems, thereof, all as amended and superseded.
8. The Customer System must meet Company and Arizona Corporation Commission interconnection requirements for self-generation equipment.
See <http://images.edocket.azcc.gov/docketpdf/0000074361.pdf> for these requirements.

Installation requirements

1. A grid-connected Residential Customer System must have a total solar array nameplate rating of at least 1,200 watts DC and no more than 20,000 watts AC.
2. The Customer System installation must meet the TEP Service Requirements 2000 Edition, Page 1.20, as follows:

"AN AC DISCONNECT MEANS SHALL BE PROVIDED ON ALL UNGROUNDED AC CONDUCTORS and SHALL CONSIST OF A LOCKABLE GANG OPERATED DISCONNECT CLEARLY INDICATING OPEN OR CLOSED. THE SWITCH SHALL BE VISUALLY INSPECTED TO DETERMINE THAT THE SWITCH IS OPEN. THE SWITCH SHALL BE CLEARLY LABELED STATING "DG SERVICE DISCONNECT."
3. The utility meter and utility disconnect will be installed in a location readily accessible by TEP during normal business hours.
4. Products must be installed according to manufacturers' recommendations.
5. The Customer System photovoltaic panels and modules must face within +/- 100 degrees of true south, and be substantially unshaded from 9 am to 3 pm. System arrays which are facing at an azimuth angle of more than 20 degrees from true south or shaded for more than one hour per day will be subject to a reduced amount of buydown payment per Attachment B.
6. The Customer System photovoltaic panels and modules must be fitted at an angle of 0 degrees to 60 degrees from horizontal. System arrays which are fitted with an elevation angle of less than 20 degrees or more than 35 degrees above horizontal will be subject to a reduced amount of buydown payment per Attachment B.

Residential Projects and Commercial Projects Smaller Than 100 kW

7. For Residential Customer Systems, Company will provide a meter and meter socket that will be installed in a readily accessible outdoor location by the Customer between the DC to AC converter and the connection to the over-current device in the Customer's electric service panel. For Non-Residential Customer Systems, Company shall provide the meter only, to be installed in a Customer supplied meter socket to be installed in a readily accessible outdoor location by the Customer between the DC to AC converter and the connection to the over-current device in the Customer's electric service panel. Installer must notify TEP of wiring configuration so that TEP may provide the appropriate 3-phase meter.
8. Total voltage drop on the DC and AC wiring from the furthest PV module to the AC meter will not exceed 2%.
9. PV panels and DC to AC inverter will be installed with sufficient clearance to allow for proper ventilation and cooling. At a minimum, manufacturer clearance recommendations will be observed. PV modules may be mounted less than 4 inches above any surface and an additional inch of clearance for each foot of continuous array surface area beyond four feet in the direction parallel to the mounting support surface, only in cases when arrays are flush-mounted to roof pitch. Otherwise, the four-inch spacing and an additional inch of clearance for each foot of continuous array surface area minimum is required.
10. Storage Batteries are not allowed as part of the Customer System unless the inverter is a separate component and TEP can locate the Solar Meter at the inverter's output. If configured otherwise, battery losses will adversely reflect in the annual AC metered energy output. Customer's solar energy generation and energy storage system must meet the requirements of 2 and 3 of this Attachment A.
11. The DC to AC inverter used must provide maximum power point tracking for the full voltage and current range expected from the photovoltaic panels used and the temperature and solar insolation conditions expected in Tucson, Arizona.
12. The DC to AC inverter must be capable of adjusting to "sun splash" from all possible combinations of cloud fringe effects without interruption of electric production.
13. TEP reserves the right to modify standards as technology changes on a case by case basis, pending independent laboratory analysis, Professional Engineer ("PE") stamp, or TEP engineering analysis.

General Requirements

1. All Customer System installations must be completed in a professional, workmanlike and safe manner.
2. Installation must have been made after January 1, 1997.

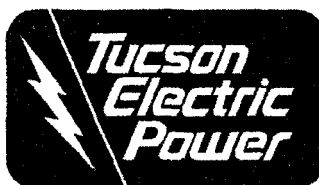
Residential Projects and Commercial Projects Smaller Than 100 kW

3. The Customer must be connected to the Company's electric grid, except for approved off-grid systems in conformance with the RECPP.
4. Systems must be permitted and inspected by the jurisdiction having authority over construction projects in the customer's locale.
5. The project must comply with applicable local, state, and federal regulations.
6. Products must be installed according to manufacturers' recommendations.
7. Installations must meet applicable governmental statutes, codes, ordinances, and accepted engineering and installation practices.
8. All major system components must be new and must not have been previously placed in service in any other location or for any other application.
9. All renewable electricity generation systems must include a dedicated performance meter (provided by TEP) which allows for measurement of system energy production. Certain other non-electric renewable energy production systems will require customer supplied metering for Performance Based Incentive ("PBI") payment calculation purposes.
10. PV system components shall be properly labeled, including AC & DC disconnects (if present), solar generation meter, service panel (outside cover), and breakers inside the service panel.
11. The system will in all cases have a material and full labor warranty of at least five years.

Additional Requirements for Off-Grid Systems

1. The minimum Solar Electric array size shall be no less than 600 Wdc. The maximum Solar Electric array size for customers currently paying into the REST tariff shall not exceed 4,000 Wac. For customers not currently paying into the REST tariff, systems shall not exceed 2,000 Wac.
2. Off-grid systems will not be metered. Compliance reporting production will be based on an annual 20% capacity factor using nameplate DC rating for capacity.

Exhibit D



A UniSource Energy Company

Up Front Incentive Renewable Energy Credit Purchase Agreement (Residential Grid Tied Solar)

This Up Front Incentive Renewable Energy Credit Purchase Agreement ("**Agreement**") is hereby made and entered into as of the 20th day of July, 2011 ("**Effective Date**"), by and between Tucson Electric Power Company, an Arizona corporation ("**Company**"), and Thomas Patzke ("**Customer**"). Company and Customer may be referred to individually herein as a "**Party**" or collectively as the "**Parties**."

RECITALS

A. Company desires to increase the number of renewable electricity generation facilities and the consumption of renewable electricity within its service territory, while concurrently reducing the cost of renewable electricity generation systems for its customers;

B. Customer intends to install, maintain and own a renewable electricity generation system and have title to the RECs (as defined below) associated with such system;

C. Company is subject to certain state regulatory requirements governing its use of renewable resources to supply energy to its customers, including those provided under the Renewable Energy Standard and Tariff (as defined below);

D. To further Company's continuing commitment to develop and encourage the use of renewable energy resources and to better ensure compliance with regulatory requirements, Company has implemented a REC purchase program to provide financial incentives to its customers to install renewable generating equipment; and

E. Customer desires to participate in Company's REC purchase program and Company desires for Customer to participate in the program under the terms and conditions contained in this Agreement.

AGREEMENT

1. DEFINITIONS

1.1. "**Acceptance Test**" means an inspection and/or other verification by Company to confirm the Customer System has been installed and operates in conformance with Customer's Program reservation and the System Qualifications.

1.2. **"Customer System"** means the ^{18.40}~~18.33~~kW output (DC) photovoltaic renewable electricity generation facility located at the Premises.

1.3. **"Installation Deadline"** means the date that is one hundred eighty (180) days after the Reservation Confirmation Date.

1.4. **"Premises"** means Customer's facilities located at 12951 N Tailwind Dr Tucson, Arizona.

1.5. **"Proof of Project Advancement"** means documentation submitted to Company demonstrating that the installation of the Customer System is progressing on schedule, including, without limitation, building and/or construction permits and any other documentation evidencing project advancement as set forth in the Program or required by Company.

1.6. **"Program"** means the Tucson Electric Power Company Renewable Energy Credit Purchase Program Definition 2010-2014, as may be amended from time to time.

1.7. **"Reservation Confirmation Date"** means the date Customer's Program reservation request is approved by Company under the Program.

1.8. **"REC"** means any and all environmental credits, attributes and benefits, including greenhouse gas or emissions reductions and any associated credits, environmental air quality credits, offsets, allowances and benefits howsoever entitled, actual SO₂, NO_x, CO₂, CO, Carbon, VOC, mercury, and other emissions avoided, credits towards achieving local, national or international renewable portfolio standards, green tags and any and all other green energy or other environmental benefits associated with the generation of renewable energy (regardless of how any present or future law or regulation attributes or allocates such characteristics), including those created under the REST.

1.9. **"Renewable Energy Standard and Tariff" or "REST"** means the Arizona Renewable Energy Standard and Tariff codified at A.A.C. R14-2-1801 *et seq.*, as may be amended from time to time.

1.10. **"System Qualifications"** means all equipment, installation and other general requirements pertaining to residential solar electric systems as set forth in the Program.

1.11. **"Term"** shall have the meaning set forth in Section 15.1 below.

1.12. **"Up Front Incentive" or "UFF"** means a one-time incentive payment based on the Customer System capacity or estimated energy kilowatt-hour ("**kWh**") production, as applicable, rather than on measured system output.

2. PROGRAM TIMELINE

Customer agrees to perform its obligations with respect to the Customer System hereunder in an expeditious manner, including, but not limited to, submitting Proof of Project Advancement to Company within sixty (60) days of the Reservation Confirmation Date, ensuring Company is provided with copies of the applicable city/county final inspection paperwork as soon as practicable after installation of the Customer System is complete, and meeting all Program requirements on or before the Installation Deadline. Failure to perform such obligations may result in cancellation of the Customer System Program reservation.

3. CUSTOMER RENEWABLE ENERGY SYSTEM

Customer owns the Customer System and will be solely responsible for its cost, operation and maintenance. The Parties acknowledge and agree that, to qualify for participation in the Program, the Customer System must comply with all System Qualifications and Program requirements.

4. SYSTEM INSTALLATION

The Customer System must have been installed at the Premises in accordance with the installation requirements set forth in the System Qualifications and the Program, including, without limitation, a proper interconnection with Company's power grid. Customer or its designee shall be solely responsible for the installation of the Customer System, including selecting a qualified installer and paying all installation costs and expenses.

5. ACCEPTANCE TEST AND INSPECTIONS

Customer will notify Company when the installation of the Customer System is complete by providing Company with a copy of the applicable city/county final inspection permit associated with the installation. Following its receipt of such notice and permit, Company will perform an Acceptance Test on the Customer System to verify the installation and system performance are in compliance with the System Qualifications. If the Company determines the Customer System is not in compliance with the System Qualifications for any reason, Company will notify Customer of such noncompliance. Company will have no further obligation under this Agreement until all such deficiencies are remedied by Customer to Company's reasonable satisfaction and the Customer System is in compliance with the System Qualifications. Unless otherwise indicated in the Customer System reservation request, Company shall have the right to conduct periodic inspections of the Customer System during the Term upon notice to Customer. Such inspections may include, without limitation, reading the Customer System's solar production meter as necessary to verify compliance with the System Qualifications. Customer shall provide Company with reasonable access to the Customer System to conduct any such inspection.

6. UP-FRONT INCENTIVE PAYMENT

6.1. Conditions Precedent. Subject to: (i) Customer's execution and delivery of this Agreement and a properly completed Form W-9 to Company, (ii) Company's receipt of a copy of the applicable city/county final inspection permit, (iii) Company's determination that the Customer System is in compliance with the System Qualifications (including by passing any required Acceptance Test) and (iv) the Customer System being operational by the Installation Deadline, Company shall pay Customer the UFI described in this Section 6.

6.2. Customer System UFI. Company shall pay Customer a UFI for the Customer System in the amount of \$2.00 per DC Watt of installed on-grid residential solar generating capacity, as determined by Company during the Customer System Acceptance Test, as prorated by any de-rating for off-angle and shading using the applicable chart in the Program.

6.3. Payments. Any UFI payment determined by Company to be owed to Customer hereunder shall be paid to Customer within thirty (30) days after the Customer System passes the Acceptance Test described under Section 5 above.

6.4. Payments Constitute Taxable Income. The IRS considers any UFI payment made to Customer to be taxable income to Customer, even if the payment is assigned to a third party. Accordingly, Customer shall deliver to Company a properly completed IRS Form W-9 prior to Company's execution of this Agreement to enable Company to issue an IRS-required Form 1099 for any UFI payment made to Customer.

7. OWNERSHIP OF RENEWABLE ENERGY CREDITS

Customer hereby irrevocably and unconditionally assigns and transfers to Company any and all RECs derived from the installation and use of the Customer System during the Term. Customer shall not sell, trade, assign or otherwise transfer, or permit to be sold, traded, assigned or otherwise transferred, any RECs derived from the installation and use of the Customer System to any party other than Company during such time Company is entitled to receive such RECs hereunder. Upon Company's request, Customer shall provide Company with reasonable documentation evidencing its ownership of such RECs and transfer thereof to Company.

8. SYSTEM ELECTRICAL OUTPUT

The ownership and rights to the electrical output of the Customer System are addressed in a separate agreement hereto.

9. CUSTOMER SYSTEM REMOVAL

Neither the Customer System nor any components thereof may be removed from the Premises during the Term without Company's prior written consent. Any such removal of the Customer System shall constitute a material breach of this Agreement and will subject Customer to the UFI refund obligations set forth in Section 14.5 below.

10. CUSTOMER REPRESENTATIONS

Customer hereby represents and warrants to Company that the following statements are true and correct as of the Effective Date and will be true and correct at the time of any transfer by Customer to Company of any RECs hereunder:

10.1. Customer is the true and lawful owner of, and has good title to, all RECs transferred from Customer to Company hereunder, free and clear of all liens and encumbrances;

10.2. Each REC transferred from Customer to Company hereunder meets the requirements of the REST;

10.3. Neither Customer nor, to Customer's knowledge, any third party has sold, traded, assigned or otherwise transferred any RECs to be transferred from Customer to Company hereunder to any party other than Company;

10.4. Customer has full power and authority to execute and deliver this Agreement and to perform its obligations hereunder, including, without limitation, the transfer of any RECs to Company; and

10.5. Customer is in full compliance with all applicable federal, state and local laws, regulations, ordinances and codes governing the production and/or sale of electricity.

11. WARRANTY

COMPANY MAKES NO REPRESENTATIONS OR WARRANTIES OF ANY KIND HEREUNDER, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO ITS PERFORMANCE HEREUNDER. WITHOUT LIMITING THE GENERALITY OF THE FOREGOING, COMPANY MAKES NO REPRESENTATIONS OR WARRANTIES WITH RESPECT TO THE CUSTOMER SYSTEM, ITS OPERATION, SAFETY, INSTALLATION OR COMPLIANCE WITH ANY BUILDING OR SAFETY CODES, RULES OR REGULATIONS, AND TO THE MAXIMUM EXTENT PERMITTED BY LAW, COMPANY HEREBY DISCLAIMS ANY AND ALL LIABILITY ASSOCIATED THEREWITH.

12. LIMITATION OF LIABILITY

COMPANY'S ENTIRE LIABILITY ARISING OUT OF ITS PERFORMANCE UNDER THIS AGREEMENT SHALL BE LIMITED TO DIRECT ACTUAL DAMAGES STEMMING FROM CLAIMS DIRECTLY ATTRIBUTABLE TO COMPANY'S GROSS NEGLIGENCE OR WILLFUL MISCONDUCT. IN NO EVENT SHALL COMPANY, ITS EMPLOYEES OR AGENTS BE LIABLE TO CUSTOMER FOR ANY SPECIAL, INDIRECT, PUNITIVE OR CONSEQUENTIAL DAMAGE, HOWEVER CAUSED, RESULTING FROM COMPANY'S PERFORMANCE HEREUNDER.

13. INDEMNIFICATION

Customer agrees to indemnify, defend and hold harmless Company, its affiliates and parent company, and all their officers, directors, shareholders, employees and agents from and against any and all costs, claims, liability, judgments and expenses of any nature whatsoever, which arise from damage to property or from injury or death which occurs as a result of the purchase, installation or maintenance of the Customer System. Customer's obligation to indemnify hereunder shall survive termination of this Agreement.

14. TERM AND TERMINATION

14.1. Term. This Agreement shall commence on the Effective Date and, unless earlier terminated as provided herein, shall continue until December 31 of the 20th full calendar year after the Customer System passes the Acceptance Test (the "Term").

14.2. Company Termination. Company may terminate this Agreement:

i. on thirty (30) days written notice to Customer in the event Customer commits a material breach of this Agreement or the Program and fails to cure the same within such thirty (30) day period;

ii. immediately in the event that Customer: (a) makes an assignment or any general arrangement for the benefit of creditors, (b) files a petition or otherwise commences, authorizes or acquiesces in the commencement of a proceeding or cause under the bankruptcy or similar law for the protection of creditors, or have such petition filed against it and such proceeding remains undismissed for thirty (30) days after filing or (c) otherwise becomes bankrupt or insolvent (however evidenced);

iii. upon (30) days prior written notice to Customer if the Customer System is not in compliance with the System Qualifications (including by passing the Acceptance Test) by the Installation Deadline and Company does not grant an extension; or

iv. immediately upon written notice to Customer in the event the Customer System Program reservation is cancelled by Company under the Program, including for a failure to meet any project advancement requirements under the Program.

14.3. Force Majeure. Either Party may terminate the Agreement as provided in Section 15.8 below.

14.4. Mutual Agreement. The Agreement may be terminated at any time by mutual written agreement of the Parties.

14.5. Effect of Termination. In the event of Company's termination of the Agreement for Customer's breach under Section 14.2(i) (including as a result of the removal of the Customer System from the Premises in violation of Section 9 above), Section 14.2(ii), 14.3, or if the Parties terminate the Agreement under Section 14.4 above, in addition to any other legal rights and remedies available to Company, Customer shall immediately refund to Company a pro-rata amount of the UFI paid to Customer hereunder corresponding to the number of months remaining in the Term. In the event of Company's termination of this Agreement under Section 14.2(iii) or 14.2(iv) above, neither Party shall have any further obligation to the other hereunder and neither Party shall have any liability to the other stemming from such termination.

15. MISCELLANEOUS

15.1. Modification, Waiver and Severability. This Agreement may not be modified or supplemented except by written instrument signed by the Parties. No waiver of any default or breach hereof shall be deemed a waiver of any other default or breach hereof. If any part of this Agreement is finally adjudicated void and/or unenforceable, such part shall be deemed severed from this Agreement which shall otherwise remain in full force and effect.

15.2. Assignment. This Agreement and the rights, duties and obligations hereunder may not be assigned or delegated by the Customer without the prior written consent of Company.

15.3. Governing Law and Venue. This Agreement shall be governed by the laws of the State of Arizona, without regard to the choice of law provisions thereof. Venue for any dispute arising hereunder shall be any court of competent jurisdiction located in Pima County, Arizona.

15.4. Entire Agreement. This Agreement is the final integration of the agreement between the Parties with respect to the matters covered by it and supersedes any prior understanding or agreements, oral or written, with respect thereto.

15.5. Counterparts. This Agreement may be executed in any number of counterparts, all of which taken together shall constitute one and the same agreement.

15.6. Titles and Captions. Titles or captions contained in this Agreement are inserted for convenience and for reference only and in no way define, limit, extend or describe the scope of this Agreement or the intent of any provision hereof.

15.7. Expenses and Attorney's Fees. In any actions between the Parties to enforce any of the terms of this Agreement, the prevailing Party shall be entitled to recover expenses, including reasonable attorney's fees.

15.8. Force Majeure. Neither Party shall be liable to the other for failure to perform its obligations hereunder to the extent such failure results from causes beyond its reasonable control, including strikes, climatic conditions, acts of God, governmental laws, regulations, orders or requirements, interruptions of power or unavailability of equipment or supplies (each a "**Force Majeure Event**"). Provided, if any Force Majeure Event claimed by a Party continues for an uninterrupted period of more than one hundred and eighty (180) days, then the other Party may, at any time following the end of such period, immediately terminate this Agreement upon written notice to the affected Party, without further obligation to the affected Party, except as to payment of any costs and liabilities incurred before the effective date of such termination.

15.9. Forward Contract. The Parties agree that this Agreement and the transactions contemplated hereunder shall constitute a "forward contract" and that Company is a "forward contract merchant" within the meaning of the United States Bankruptcy Code.

15.10. Customer Sale of Premises. In the event Customer sells or otherwise transfers the Premises, Customer's successor-in-interest shall expressly assume all of Customer's obligations hereunder in writing by executing an assignment and Assumption Agreement in the form of Attachment A attached hereto and incorporated herein (the "**Assignment Agreement**"), and this Agreement shall not be affected, nor shall Company's rights hereunder be disturbed in any way, including, without limitation, Company's continued right to all RECs assigned pursuant to Section 7 above. Customer shall provide Company with an executed Assignment Agreement at the time of the sale or transfer of the Premises. Any failure to comply with this Section 15.10 shall be considered a material breach of the Agreement.

15.11. Compliance with Law. Customer shall comply with all applicable federal, state and local laws, regulations, ordinances and codes at all times in performing under this Agreement.

15.12. Survival. After expiration or termination of this Agreement, those provisions which specifically provide for survival beyond expiration or termination, and all provisions regarding warranty and limitation of liability, shall survive indefinitely or until the expiration of the time period specified elsewhere in this Agreement with respect to the provision in question.

15.13. No Third Party Beneficiaries. This Agreement shall not confer any rights or remedies upon any person other than the Parties and their respective successors and permitted assigns.

15.14. Taxes. Customer shall pay all local, state and federal taxes, levies, duties and assessments of every nature whatsoever which may be imposed or due in connection with the RECs sold to Company hereunder. Customer shall hold Company harmless from any and all future liability on account of any and all such taxes, levies, duties and assessments.

15.15. Notices. All notices under this Agreement shall be in writing and shall be given by personal service (including receipted confirmed facsimile), or by certified or registered mail, return receipt requested, or by recognized overnight courier service to the Parties at the addresses set forth below. All notices shall be deemed given upon the actual receipt thereof.

Company:

Tucson Electric Power Company

PO Box 711

Tucson, Arizona 85702

Fax: (520) 918-8350

Attn: Renewable Energy & Energy Efficiency Group

Customer:

Thomas Patzke

12951 N Tailwind Dr

Tucson, AZ 85755

Phone: (717) 876-5949

Fax:

ACCEPTED AND AGREED as of the Effective Date.

TUCSON ELECTRIC POWER COMPANY

By: 

Print Name: _____

Title: **Director - Renewable
Energy Resources**

CUSTOMER

By: Thomas Patzke

Print Name: Thomas Patzke

ATTACHMENT A
FORM OF
ASSIGNMENT AND ASSUMPTION AGREEMENT
(see attached)

ASSIGNMENT AND ASSUMPTION AGREEMENT

This Assignment and Assumption Agreement (the "**Assignment**") dated as of _____ 20____ (**Effective Date**), is made by and between _____ ("**Seller**"), _____ ("**Buyer**") and Tucson Electric Power Company ("**Company**"). Seller, Buyer and Company may be referred to herein collectively as the "**Parties**" or individually as a "**Party**."

RECITALS

Seller is a party to a Renewable Energy Credit Purchase Agreement with Company dated _____, 20____ (the "**REC Agreement**"). The REC Agreement pertains to the Customer System (as defined in the REC Agreement) located at _____ (the "**Premises**") that the Seller intends to sell to the Buyer; and

The REC Agreement requires that any purchaser of the Premises assume Seller's obligations under the REC Agreement. Incident to the sale of the Premises by Seller to Buyer, the Parties desire to effect the required assumption by this Assignment.

NOW, THEREFORE, in consideration of these premises and of the mutual promises herein contained, the Parties hereby agree as follows:

AGREEMENT

1. **ASSIGNMENT.** Incident to the sale of the Premises, Seller hereby assigns and transfers to Buyer the REC Agreement and all of Seller's right, interest, obligations and liabilities thereunder effective upon the sale of the Premises. Buyer hereby accepts the assignment of the REC Agreement from Seller, and assumes all of Seller's obligations and liabilities thereunder effective upon the sale of the Premises. Company hereby consents to such assignment and assumption of the REC Agreement. The Assignment does not affect the REC Agreement or Company's rights thereunder, including, without limitation, Company's continued right to any credits assigned thereunder.

2. **MISCELLANEOUS.** This Assignment may not be modified or supplemented except by written instrument signed by the Parties. This Assignment and the rights, duties and obligations hereunder may not be assigned or delegated by Buyer or Seller without the prior written consent of Company. This Assignment may be executed in any number of counterparts, all of which taken together shall constitute one and the same agreement.

ACCEPTED AND AGREED as of the Effective Date.

BUYER

SELLER

By: _____
Name: _____

By: _____
Name: _____

TUCSON ELECTRIC POWER COMPANY

By: _____
Name: _____
Title: _____



Residential Renewable Energy Application Package Coversheet

**All fields are required*

Customer Name Thomas Patzke Date July 20 2011

Customer Email thpatzke@aol.com

Project Address 12951 N Tailwind Dr

City Tucson, AZ Zip Code 85755

System(s): ☒ Photovoltaic ☐ Solar Hot Water ☐ Other (describe) _____

Installer Technicians for Sustainability Phone Number (520)740-0736

Installer Email info@tfssolar.com

Please initial to indicate you have read and understand each of the following statements:

Th.P. KK
Customer Initial Installer Initial

An application for the above address has been submitted to TEP online.

This outlines the installer's intentions for the above renewable project. This application tells TEP how much money to reserve. If the installer chooses to increase the system size, only the amount reserved will be incented.

Enclosed:

Th.P. KK
Customer Initial Installer Initial

A completed W-9 form for the customer(s) listed at the above address

The incentive payment received from the utility is for the purchase of the customer's Renewable Energy Credits and should be considered taxable income. As such, a W-9 Form is required to be completed by the customer. A W-9 from the customer(s) is required even if an assignment of payment to another party has been made. TEP will issue the customer a 1099 in January of the following year. It is recommended the customer discuss the tax implications with their financial advisor.

Th.P. KK
Customer Initial Installer Initial

A completed and signed copy of the current UFI Renewable Energy Credit Purchase Program Agreement

This document outlines the requirements both TEP and the customer must adhere to. Currently the customer has 180 days from the date an application is submitted for the system to be installed and functioning unless a 90 day written extension is filed for. If the system is not installed and functioning within this timeframe, the customer must re-submit the application, in its entirety. Please ensure the UFI agreement is signed by the customer.

Th.P. KK
Customer Initial Installer Initial

A completed Assignment of Payment form

TEP requires this document if the incentive is to be paid to a third party. Installers or wholesalers will commonly 'float' this money, thereby avoiding a larger upfront payment by the customer. Changes to the Assignment of Payment after submission cannot be made.

☒ Assignment of Payment not applicable. Incentive to be paid directly to customer.

WHEN COMPLETE PLEASE MAIL RENEWABLE ENERGY APPLICATION PACKAGE TO:
TUCSON ELECTRIC POWER COMPANY, ATTENTION RENEWABLES DEPARTMENT, PO BOX 711, MAILSTOP DS-501, TUCSON, AZ 85702

JUL 26 2011

ASSIGNMENT OF PAYMENT

I, Thomas Patzke, (please print name) residing at
12951 N Tailwind Dr, Tucson, Arizona 85755

(please print address) hereby assign my right to receive any incentive payment from Tucson Electric Power Company (TEP) toward the cost and/or installation of my photovoltaic ☒ and/or solar hot water system ☐ under the Renewable Energy Credit Purchase Agreement between TEP and me (Agreement) to the company listed below (Company). In association with this assignment, I hereby authorize TEP to make such incentive payment on my behalf directly to Company. I acknowledge and agree that except for such assigned incentive payment, TEP is not responsible to make any payment to Company, including for any amounts that I may owe Company. I further acknowledge and agree that TEP's payment to Company of such assigned incentive fully satisfies TEP's obligation to pay any incentive under the Agreement. Finally, I acknowledge and agree that this payment represents taxable income to me for which I will be issued an IRS Form 1099-MISC, Miscellaneous Income, and that this Assignment is not valid until I have provided an accurate Taxpayer Identification Number (TIN or SSN) to TEP.

Company Name: Technicians for Sustainability ✓

Contact Person: Erika Roush

Business Address: PO Box 1109, Tucson, AZ 85702

Customer Signature: Thomas Patzke

Date: July 21, 2011

JUL 26 2011

EXHIBIT E

**TEP RESIDENTIAL SOLAR PV PROGRAM
CERTIFICATION OF COMPLETION**

INSTRUCTIONS FOR FILLING OUT INSTALLATION CERTIFICATION

1. Completely fill in all blank spaces below
2. Installer must sign this document
3. When complete please e-mail to: sunshare@tep.com

TEP MAIN CUSTOMER INFORMATION

Name Tom and Karin Patzke

Project Address 12951 N Tailwind Dr

City Tucson State AZ Zip 85737 Phone Number (714)876-5949

E-Mail Address thpatzke@aol.com

PV System Installation Information

Module Manufacturer Phono Solar Type mono BIPV N/A

Module Nameplate DC Rating 240 Watts Quantity of Modules 78 Total System Size 18.72 kW

Module Location (i.e., Roof, Ground, etc.) ground Mounting Type (i.e., Fixed, Single, Dual) fixed

Inverter Make, Model Number, Size and Quantity 3 SMA Sunny Boy 6000

Inverter Location (Outdoor/Garage) in garage

Horizontal Tilt Angle 25 degrees Azimuth Tilt Angle 180 degrees Shading Issues none

AC Disconnect Location adjacent to utility meter Distance from utility meter adjacent to utility meter feet

Total Cost \$63,040 PV Cost \$44,900 Labor Cost \$18,140

Incentive Payment

TEP, at their discretion, may elect to pay the incentive based on the answers provided, or may elect to conduct a system inspection and pay the incentive based on the outcome of said inspection.

The incentive paid may differ than the incentive quoted to the TEP customer for a variety of reasons, including but not limited to changes in the following: horizontal tilt, azimuth angle, shading, etc. TEP shall review the system information and base the incentive payment on the system's compliance with the TEP Renewable Energy Credit Purchase Program (RECPP), including a reduction for any off-angle and shading as provided under the RECPP. The amount of the incentive payment shall be in TEP's sole discretion.

THE INCENTIVE PAID SHALL BE FINAL.

Certification

By signing below, you certify that the system has been installed in compliance with the manufacturer's recommendations and the requirements under the RECPP as outlined below and that the answers provided herein are accurate and submitted as a final confirmation.

The system has been installed in compliance with IEEE 929 "Recommended Practice for Utility Interface of Photovoltaic (PV) Systems," TEP's Service Requirements and the latest edition of the National Electrical Code, including Article 690 and all grounding, conductor, raceway, over-current protection, disconnect and labeling requirements.

Photovoltaic components are certified by a nationally recognized testing laboratory as meeting the requirements of UL-1703.

The inverter has been certified as meeting the requirements of IEEE-1547 - Recommended Practice for Utility Interface of Photovoltaic Systems and is UL-1741 certified.

Installer (Signature) [Signature] Date December 23, 2011

Name Printed Kevin Koch Company Technicians for Sustainability

THIS IS A REQUIRED DOCUMENT FOR PAYMENT PROCESSING. IT MUST BE COMPLETED AFTER THE PV SYSTEM HAS BEEN INSTALLED. PAYMENT PROCESSING WILL NOT PROCEED UNTIL ALL RECPP REQUIREMENTS HAVE BEEN MET AND THE PV PROGRAM CERTIFICATE OF COMPLETION HAS BEEN RECEIVED BY TEP.

DEC 23 2011

EXHIBIT F

**TEP RESIDENTIAL SOLAR PV PROGRAM
CERTIFICATION OF COMPLETION**

INSTRUCTIONS FOR FILLING OUT INSTALLATION CERTIFICATION

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3. When complete please e-mail to: sunshare@tep.com

TEP MAIN CUSTOMER INFORMATION

Name Tom and Karin Patzke

Project Address 12951 N Tailwind Dr

City Tucson State AZ Zip 85737 Phone Number (714)876-5949

E-Mail Address thpatzke@aol.com

PV System Installation Information

Module Manufacturer Phono Solar Type mono BIPV N/A

Module Nameplate DC Rating 230 Watts Quantity of Modules 80 Total System Size 18.4 kW *see file*

Module Location (i.e., Roof, Ground, etc.) ground Mounting Type (i.e., Fixed, Single, Dual) fixed

Inverter Make, Model Number, Size and Quantity 2 SMA Sunny Boy 6000, 1 SMA Sunny Boy 7000

Inverter Location (Outdoor/Garage) in garage

Horizontal Tilt Angle 25 degrees Azimuth Tilt Angle 180 degrees Shading Issues none

AC Disconnect Location adjacent to utility meter Distance from utility meter adjacent to utility meter feet

Total Cost \$63,040 PV Cost \$44900 Labor Cost \$18,140

Incentive Payment

TEP, at their discretion, may elect to pay the incentive based on the answers provided, or may elect to conduct a system inspection and pay the incentive based on the outcome of said inspection.

The incentive paid may differ than the incentive quoted to the TEP customer for a variety of reasons, including but not limited to changes in the following: horizontal tilt, azimuth angle, shading, etc. TEP shall review the system information and base the incentive payment on the system's compliance with the TEP Renewable Energy Credit Purchase Program (RECPP), including a reduction for any off-angle and shading as provided under the RECPP. The amount of the incentive payment shall be in TEP's sole discretion.

THE INCENTIVE PAID SHALL BE FINAL.

Certification

By signing below, you certify that the system has been installed in compliance with the manufacturer's recommendations and the requirements under the RECPP as outlined below and that the answers provided herein are accurate and submitted as a final confirmation.

The system has been installed in compliance with IEEE 929 "Recommended Practice for Utility Interface of Photovoltaic (PV) Systems," TEP's Service Requirements and the latest edition of the National Electrical Code, including Article 690 and all grounding, conductor, raceway, over-current protection, disconnect and labeling requirements.

Photovoltaic components are certified by a nationally recognized testing laboratory as meeting the requirements of UL-1703.

The inverter has been certified as meeting the requirements of IEEE-1547 - Recommended Practice for Utility Interface of Photovoltaic Systems and is UL-1741 certified.

Installer (Signature) *Kevin Koch* Date December 23, 2011

Name Printed Kevin Koch Company Technicians for Sustainability

THIS IS A REQUIRED DOCUMENT FOR PAYMENT PROCESSING. IT MUST BE COMPLETED AFTER THE PV SYSTEM HAS BEEN INSTALLED. PAYMENT PROCESSING WILL NOT PROCEED UNTIL ALL RECPP REQUIREMENTS HAVE BEEN MET AND THE PV PROGRAM CERTIFICATE OF COMPLETION HAS BEEN RECEIVED BY TEP.

EXHIBIT G

**TEP RESIDENTIAL SOLAR PV PROGRAM
CERTIFICATION OF COMPLETION**

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TEP MAIN CUSTOMER INFORMATION

Name Tom and Karin Patzke
Project Address 12951 N Tailwind Dr
City Tucson State AZ Zip 85737 Phone Number (714)876-5949
E-Mail Address thpatzke@aol.com

PV System Installation Information

Module Manufacturer Phono Solar Type mono BIPV N/A
Module Nameplate DC Rating 230 Watts Quantity of Modules 80 Total System Size 18.4 kW
Module Location (i.e., Roof, Ground, etc.) ground Mounting Type (i.e., Fixed, Single, Dual) fixed
Inverter Make, Model Number, Size and Quantity 2 SMA Sunny Boy 6000, 1 SMA Sunny Boy 7000
Inverter Location (Outdoor/Garage) in garage
Horizontal Tilt Angle 25 degrees Azimuth Tilt Angle 180 degrees Shading Issues none
AC Disconnect Location adjacent to utility meter Distance from utility meter adjacent to utility meter feet
Total Cost \$65,088 PV Cost \$46,150 Labor Cost \$18,938

Incentive Payment

TEP, at their discretion, may elect to pay the incentive based on the answers provided, or may elect to conduct a system inspection and pay the incentive based on the outcome of said inspection.

The incentive paid may differ than the incentive quoted to the TEP customer for a variety of reasons, including but not limited to changes in the following: horizontal tilt, azimuth angle, shading, etc. TEP shall review the system information and base the incentive payment on the system's compliance with the TEP Renewable Energy Credit Purchase Program (RECPP), including a reduction for any off-angle and shading as provided under the RECPP. The amount of the incentive payment shall be in TEP's sole discretion.
THE INCENTIVE PAID SHALL BE FINAL.


Certification

By signing below, you certify that the system has been installed in compliance with the manufacturer's recommendations and the requirements under the RECPP as outlined below and that the answers provided herein are accurate and submitted as a final confirmation.

The system has been installed in compliance with IEEE 929 "Recommended Practice for Utility Interface of Photovoltaic (PV) Systems," TEP's Service Requirements and the latest edition of the National Electrical Code, including Article 690 and all grounding, conductor, raceway, over-current protection, disconnect and labeling requirements.

Photovoltaic components are certified by a nationally recognized testing laboratory as meeting the requirements of UL-1703.

The inverter has been certified as meeting the requirements of IEEE-1547 - Recommended Practice for Utility Interface of Photovoltaic Systems and is UL-1741 certified.

Installer (Signature)  Date December 23, 2011
Name Printed Kevin Koch Company Technicians for Sustainability

THIS IS A REQUIRED DOCUMENT FOR PAYMENT PROCESSING. IT MUST BE COMPLETED AFTER THE PV SYSTEM HAS BEEN INSTALLED. PAYMENT PROCESSING WILL NOT PROCEED UNTIL ALL RECPP REQUIREMENTS HAVE BEEN MET AND THE PV PROGRAM CERTIFICATE OF COMPLETION HAS BEEN RECEIVED BY TEP.

EXHIBIT H

**TEP RESIDENTIAL SOLAR PV PROGRAM
CERTIFICATION OF COMPLETION**

INSTRUCTIONS FOR FILLING OUT INSTALLATION CERTIFICATION

1. Completely fill in all blank spaces below
2. Installer must sign this document
3. When complete please e-mail to: sunshare@tep.com

TEP MAIN CUSTOMER INFORMATION

Name Tom and Karin Patzke

Project Address 12951 N Tailwind Dr

City Tucson State AZ Zip 85737 Phone Number (714)876-5949

E-Mail Address thpatzke@aol.com

PV System Installation Information

Module Manufacturer Phono Solar Type mono BIPV N/A

Module Nameplate DC Rating 230 Watts Quantity of Modules 80 Total System Size 18.4 kW

Module Location (i.e., Roof, Ground, etc.) ground Mounting Type (i.e., Fixed, Single, Dual) fixed

Inverter Make, Model Number, Size and Quantity 2 SMA Sunny Boy 6000, 1 SMA Sunny Boy 7000

Inverter Location (Outdoor/Garage) in garage

Horizontal Tilt Angle 25 degrees Azimuth Tilt Angle 180 degrees Shading Issues none

AC Disconnect Location adjacent to utility meter Distance from utility meter adjacent to utility meter feet

Total Cost \$73,381 PV Cost \$61,781 Labor Cost \$11,600

Incentive Payment

TEP, at their discretion, may elect to pay the incentive based on the answers provided, or may elect to conduct a system inspection and pay the incentive based on the outcome of said inspection.

The incentive paid may differ than the incentive quoted to the TEP customer for a variety of reasons, including but not limited to changes in the following: horizontal tilt, azimuth angle, shading, etc. TEP shall review the system information and base the incentive payment on the system's compliance with the TEP Renewable Energy Credit Purchase Program (RECPP), including a reduction for any off-angle and shading as provided under the RECPP. The amount of the incentive payment shall be in TEP's sole discretion.

THE INCENTIVE PAID SHALL BE FINAL.

Certification

By signing below, you certify that the system has been installed in compliance with the manufacturer's recommendations and the requirements under the RECPP as outlined below and that the answers provided herein are accurate and submitted as a final confirmation.

The system has been installed in compliance with IEEE 929 "Recommended Practice for Utility Interface of Photovoltaic (PV) Systems," TEP's Service Requirements and the latest edition of the National Electrical Code, including Article 690 and all grounding, conductor, raceway, over-current protection, disconnect and labeling requirements.

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The inverter has been certified as meeting the requirements of IEEE-1547 – Recommended Practice for Utility Interface of Photovoltaic Systems and is UL-1741 certified.

Installer (Signature) [Signature] Date December 23, 2011

Name Printed Kevin Koch Company Technicians for Sustainability

THIS IS A REQUIRED DOCUMENT FOR PAYMENT PROCESSING. IT MUST BE COMPLETED AFTER THE PV SYSTEM HAS BEEN INSTALLED. PAYMENT PROCESSING WILL NOT PROCEED UNTIL ALL RECPP REQUIREMENTS HAVE BEEN MET AND THE PV PROGRAM CERTIFICATE OF COMPLETION HAS BEEN RECEIVED BY TEP.

EXHIBIT I

From: Tom [mailto:thpatzke@aol.com]
Sent: Friday, February 17, 2012 11:06 AM
To: Anderson, Blanka
Cc: Karin Patzke
Subject: Fwd: Patzke TEP rebate

Blanka,

I am resending my email from two days ago: just wanted to be sure that you received it, since I had not heard from you.

Thank you.

Than

Regards,
Tom Patzke
714-8765949

Begin forwarded message:

From: Tom Patzke <thpatzke@aol.com>
Date: February 15, 2012 12:14:50 MST
To: BAnderson@tep.com
Cc: kpatzke@aol.com
Subject: Re: Patzke TEP rebate

Blanka,

The breakdown is as follows:

TFS original COC submitted		\$65,088.00
Missing Invoices from Patzke		\$16,328.00
<u>Credit from TFS Settlement</u>	<u>-</u>	<u>\$ 8,035.00</u>
Total System Cost		\$73,381.00

The "Credit from TFS Settlement" pertains to a labor invoice from TFS to me that was included in the original \$65,088.00 submission to TEP. That invoice was subsequently reduced by \$8,035.00, therefor reducing the cost of my system and explaining the credit.

I have attached a spreadsheet of final costs that TFS did not submit in their original submission of COC to you: \$16,328.00 This information you should have already had, according to Erika from TFS, since she told me it had been forwarded to you.

Blanka, again, it is unfortunate that TFS chose to hastily submit a COC to you, without having accounted for all costs. "Haste makes waste" and this is a prime example. I don't understand the rush...?!

Again, I have been unable to deposit your original check for \$32,544.00, because it was made out to TFS and then endorsed to me, which is unacceptable to Wells Fargo. All my accounts with TFS are settled and it would be better, if I return your rebate check in exchange for a corrected check.

I hope this is the "outline" you were looking for. Thanks and sorry for all the extra work we are going through.

Regards,

Tom Patzke
714-8765949

-----Original Message-----

From: BAnderson <BAnderson@tep.com>
To: thpatzke <thpatzke@aol.com>
Cc: kpatzke <kpatzke@aol.com>
Sent: Wed, Feb 15, 2012 9:25 am
Subject: RE: Patzke TEP rebate

Yes. There's a significant change. I understand missing a few hundred dollars but we speaking of thousands from the first to the second to the third submission. I am sure you understand I need to be able to defend/explain the difference should auditing question me the person that made the payment.

Thank you so much for your help.

BA

From: Tom [mailto:thpatzke@aol.com]
Sent: Wednesday, February 15, 2012 9:20 AM
To: Anderson, Blanka
Cc: <kpatzke@aol.com>
Subject: Re: Patzke TEP rebate

When you say "outline", do you mean additional invoice from first submission? If so, yes I can send that.

Regards,
Tom Patzke
714-8765949

On Feb 15, 2012, at 8:56, <BAnderson@tep.com> wrote:

Mr. Patke: Good morning. We have a significant change from the first submission to the final submission of the COC. I am happy to reissue monies if necessary; however, I need to have an outline of the nearly \$10,000 difference. Understandably travel and the pressure from TEP to get things paid in 2011 made the communications more difficult and for my part I certainly apologize; however, the resolution will remain the same. Is this outline something that TFS can provide or you can send me?

Please let me know how I can help.

BA

From: Tom Patzke [<mailto:thpatzke@aol.com>]
Sent: Wednesday, February 15, 2012 8:30 AM
To: Anderson, Blanka
Cc: kpatzke@aol.com
Subject: Patzke TEP rebate

Blanka,

at the bottom of this email, you will find correspondence between Erika from TFS and myself. As a matter of explanation it is important to note that TFS was the contractor on this job, but that certain items, like grubbing, clearing, grading, trenching, conduit installation, foundation prep, pouring concrete footers, steel for rack, rack mounting etc, etc. were subcontracted by me and not by TFS. Final accounting and billing for those items was coming from me to TFS.

Our PV system was commissioned by TEP and taken live on December 28, 2011. During this time I was vacationing in Northern Idaho. After the New Year Holiday, Erika called to ask me for receipts of items subcontracted by me. Since I was in Idaho and not in Tucson, where all the records are, I told Erika that I would get all billing to her upon my return and as soon as all invoices are in my possession.

I do not understand where the sudden rush came from, but as you can see below, Erika proceeded to submit COC numbers to you, without waiting for final accounting from me. As soon as she told me that, I asked her immediately to rescind the submission to TEP, since it was incomplete and would result in a large rebate error. (See below.)

Erika then told me that she had communicated with you and that upon her receipt of final invoicing from me, she would submit that invoice to TEP and you offered to re-open the file. I subsequently sent Erika my final invoicing for \$16,328.00, which she had promised to forward to you.

I was surprised, when TEP issued their check to TFS, without consideration of the final invoice amount.

Per TFS final calculation, our System Costs were \$73,381.00

Blanka, the TEP rebate check was made out to TFS and since my account with TFS was settled, they endorsed your rebate check in the amount of \$32,544.00 and sent it to me. Wells Fargo Bank will not accept that check from me and I am suggesting that I send the check back to you for reissue.

Please advise.

Call with any questions you may still have.

Regards,

Tom Patzke
714-8765949

-----Original Message-----

From: Technicians For Sustainability <info@tfssolar.com>

To: Tom Patzke <thpatzke@aol.com>

Sent: Thu, Jan 12, 2012 10:46 am

Subject: Fwd: TEP rebate

Tom,

I haven't seen the receipt from you. Please send those as soon as possible so we can take advantage of TEP's offer to re-look at this case.

Erika

----- Forwarded message -----

From: **Technicians For Sustainability** <info@tfssolar.com>

Date: Thu, Jan 5, 2012 at 9:09 AM

Subject: Re: TEP rebate

To: Tom <thpatzke@aol.com>

TEP said to give me your receipts and they would see if they can pay the difference.

Erika

On Tue, Jan 3, 2012 at 3:44 PM, Tom <thpatzke@aol.com> wrote:

Erika,

Please do not submit to TEP!! The numbers you got out if me were approximate and given from a cabin in the woods in Northern Idaho. I have to look at all my invoices and charges, some of which I have not received yet!!

I sincerely hope that TEP will not issue a check based on your submittal. That would be a large error!! Please rescind your submission to TEP immediately. It is incomplete!!

Regards,
Tom Patzke
714-8765949

On Jan 3, 2012, at 10:18, Technicians For Sustainability
<info@tfssolar.com> wrote:

Tom,

Based on the numbers you gave me on the phone earlier I submitted to TEP a total system cost of \$65,088.

--

Erika Roush
Technicians for Sustainability
612 N 7th Ave., Tucson, AZ 85705
(520)740-0736
www.tfssolar.com

Final Invoices Patzke Solar

Patzke Solar

	Rate per Day/hrs	Units	Charge
Gannon Rental, AJ Leasing	\$200.00	6	\$1,200.00
Dump Trailer Rental, AJ Leasing	\$95.00	12	\$1,140.00
Skid Steer/Forks, AIM Services	\$200.00	32	\$6,400.00
Horizon Steel, pipe Fab, deliver			\$1,600.00
Fuel			\$150.00
Pioneer Rock, Gravel			\$1,213.00
Kris Lavandero, Supervision, Labor	\$35.00	80	\$2,800.00
Nick Patzke, Labor	\$25.00	38	\$950.00
Chris Patzke, Labor	\$25.00	35	\$875.00
Sub-Total			\$16,328.00

EXHIBIT J



Residential Renewable Energy Application Package Coversheet

*All fields are required

Customer Name Philip J. Parish Date July 29 2011
Customer Email philip.parish@gmail.com
Project Address 13330 N Pilot Dr
City Tucson, AZ Zip Code 85755
System(s): ☒ Photovoltaic ☐ Solar Hot Water ☐ Other (describe) _____
Installer Technicians for Sustainability Phone Number (520)740-0736
Installer Email info@tfssolar.com

Please initial to indicate you have read and understand each of the following statements:

 **KK**
Customer Initial Installer Initial

An application for the above address has been submitted to TEP online.

This outlines the installer's intentions for the above renewable project. This application tells TEP how much money to reserve. If the installer chooses to increase the system size, only the amount reserved will be incented.

Enclosed:

 **KK**
Customer Initial Installer Initial

A completed W-9 form for the customer(s) listed at the above address

The incentive payment received from the utility is for the purchase of the customer's Renewable Energy Credits and should be considered taxable income. As such, a W-9 Form is required to be completed by the customer. A W-9 from the customer(s) is required even if an assignment of payment to another party has been made. TEP will issue the customer a 1099 in January of the following year. It is recommended the customer discuss the tax implications with their financial advisor.

 **KK**
Customer Initial Installer Initial


A completed and signed copy of the current UFI Renewable Energy Credit Purchase Program Agreement

This document outlines the requirements both TEP and the customer must adhere to. Currently the customer has 180 days from the date an application is submitted for the system to be installed and functioning unless a 90 day written extension is filed for. If the system is not installed and functioning within this timeframe, the customer must re-submit the application, in its entirety. Please ensure the UFI agreement is signed by the customer.

 **KK**
Customer Initial Installer Initial

A completed Assignment of Payment form

TEP requires this document if the incentive is to be paid to a third party. Installers or wholesalers will commonly 'float' this money, thereby avoiding a larger upfront payment by the customer. Changes to the Assignment of Payment after submission cannot be made.

 Assignment of Payment not applicable. Incentive to be paid directly to customer.

WHEN COMPLETE PLEASE MAIL RENEWABLE ENERGY APPLICATION PACKAGE TO:
TUCSON ELECTRIC POWER COMPANY, ATTENTION RENEWABLES DEPARTMENT, PO BOX 711, MAILSTOP DS-501, TUCSON, AZ 85702

AUG 03 2011

Phillip Parra

Reset Zone Export To Excel Print Zone Show Service Data Show SQL Renewable Application Details

Filtered by Case ID 3065420109

Characteristic	Characteristic Value
1 Adjustment ID for the Payment	556336879165
2 Application Received Date	2011-07-29
3 Assignment of Payment (Y/N)	No
4 Calculated UFI/PBI Amount	36706.50
5 City and County Permit Secured (Y/N)	No
6 Customer Type (Residential / Non-Residential)	Residential
7 DSM/RE Service Agreement ID	5563399347
8 DSM Service Point ID	9778348907
9 Equipment Cost	51021.00
10 Estimated Installation Date	2011-01-01
11 Final Nameplate Output	18400
12 Final UNS Incentive Payment Amount	36706.50
13 Finance Cost	0.00
14 Inspection Authorization (Y/N)	Yes
15 Installer ID	3972268274
16 Inverter Make and Model Number	SUNNYBOY 6000 AND SUNNYBOY 7000
17 Inverter Warranty	10
18 Labor Cost	22392.00
19 Model Supplier Name	Technicians for Sustainability
20 Module Manufacturer	PHONO SOLAR
21 Module Type	MONO
22 Module Warranty	25
23 Nameplate DC Rating	230
24 Net Metering (Y/N)	Yes
25 Person ID for the Assignment of Payment	3972268274
26 Project Type (On/Off Grid)	On Grid
27 Quantity of Modules	80
28 Rebate Processing (UFI/PBI)	UFI
29 REC Multiplier	1
30 RE Program Category	Residential DG
31 Satisfied ACC Interconnection/REST Requirements (Y/N)	Yes
32 Self Installation Flag (Y/N)	No
33 System a BIPV Flag (Y/N)	No
34 Total Cost	73413.00
35 UFI Amount	36800.00
36 UFI-Annual Savings	18400.0
37 UFI Rate	2.00

**TEP RESIDENTIAL SOLAR PV PROGRAM
CERTIFICATION OF COMPLETION**

INSTRUCTIONS FOR FILLING OUT INSTALLATION CERTIFICATION

1. Completely fill in all blank spaces below
2. Installer must sign this document
3. When complete please e-mail to: sunshare@tep.com

TEP MAIN CUSTOMER INFORMATION

Name Phillip Parish
Project Address 13330 N Pilot Dr.
City Tucson State AZ Zip 85737 Phone Number (520)250-1566
E-Mail Address philip.parish@gmail.com

PV System Installation Information

Module Manufacturer Phono Solar Type mono BIPV N/A
Module Nameplate DC Rating 230 Watts Quantity of Modules 80 Total System Size 18.4 kW
Module Location (i.e., Roof, Ground, etc.) ground Mounting Type (i.e., Fixed, Single, Dual) fixed
Inverter Make, Model Number, Size and Quantity 2 SMA Sunny Boy 6000; 1 SMA Sunny Boy 7000
Inverter Location (Outdoor/Garage) in garage
Horizontal Tilt Angle 25 degrees Azimuth Tilt Angle 180 degrees Shading Issues none
AC Disconnect Location adjacent to utility meter Distance from utility meter adjacent to utility meter feet
Total Cost \$73,413 PV Cost \$51,021 Labor Cost \$22,392

Incentive Payment

TEP, at their discretion, may elect to pay the incentive based on the answers provided, or may elect to conduct a system inspection and pay the incentive based on the outcome of said inspection.

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THE INCENTIVE PAID SHALL BE FINAL.

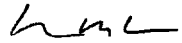
Certification

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Photovoltaic components are certified by a nationally recognized testing laboratory as meeting the requirements of UL-1703.

The inverter has been certified as meeting the requirements of IEEE-1547 - Recommended Practice for Utility Interface of Photovoltaic Systems and is UL-1741 certified.

Installer (Signature)  Date February 13, 2011
Name Printed Kevin Koch Company Technicians for Sustainability

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